HANDBOOK 28 (1957)

1963 SUPPLEMENT

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES

1963 SUPPLEMENT TO HANDBOOK H28 (1957)

THE NATIONAL BUREAU OF STANDARDS

Functions and Activities

The functions of the National Bureau of Standards are set forth in the Act of Congress, March 3, 1901, as amended by Congress in Public Law 619, 1950. These include the development and maintenance of the national standards of measurement and the provision of means and methods for making measurements consistent with these standards; the determination of physical constants and properties of materials; the development of methods and instruments for testing materials, devices, and structures; advisory services to government agencies on scientific and technical problems; invention and development of devices to serve special needs of the Government; and the development of standard practices, codes, and specifications. The work includes basic and applied research, development, engineering, instrumentation, testing, evaluation, calibration services, and various consultation and information services. Research projects are also performed for other government agencies when the work relates to and supplements the basic program of the Bureau or when the Bureau's unique competence is required. The scope of activities is suggested by the listing of divisions and sections on the inside of the back cover.

Publications

The results of the Bureau's research are published either in the Bureau's own series of publications or in the journals of professional and scientific societies. The Bureau itself publishes three periodicals available from the Government Printing Office: The Journal of Research, published in four separate sections, presents complete scientific and technical papers; the Technical News Bulletin presents summary and preliminary reports on work in progress; and Central Radio Propagation Laboratory Ionospheric Predictions provides data for determining the best frequencies to use for radio communications throughout the world. There are also five series of nonperiodical publications: Monographs, Applied Mathematics Series, Handbooks, Miscellaneous Publications, and Technical Notes.

A complete listing of the Bureau's publications can be found in National Bureau of Standards Circular 460, Publications of the National Bureau of Standards, 1901 to June 1947 ($1.25), and the Supplement to National Bureau of Standards Circular 460, July 1947 to June 1957 ($1.50), and Miscellaneous Publication 240, July 1957 to June 1960 (Includes Titles of Papers Published in Outside Journals 1950 to 1959) ($2.25); available from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402.

1963 SUPPLEMENT TO NATIONAL BUREAU OF STANDARDS HANDBOOK H28(1957)
PARTS I, II, & III

1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES 1957

(PARTS I, II, & III)

Prepared by direction of the
Interdepartmental Screw Thread Committee

[Issued October 15, 1963]

Reprint Information

This Supplement specifies changes to the November 1960 Reprint of Handbook H28(1957), Part I (which is identified by a block on the cover which reads "Reprinted November 1960 with corrections") and the original issues of Parts II and III. The April 1962 reprints of Parts II and III (which are identified by a block on the cover which reads "Reprinted April 1962 with corrections") include the changes shown in this Supplement except for the corrections shown for table VIII.2 of Part II and changes shown for paragraph on p. 33 of Part III. For the information of those having the original printing of Part I or the March 1958 reprint, the information relative to corrections included in the 1960 Reprint of Part I is as follows:

Reprinted with Corrections

November 1960

Pages 9, 12, 18, 20, 29, 30, 35, 51, 61, 69, 80 to 91, 99, 107, 109, 112, 117 to 119, 129, 163, 182 to 185, 187, 190, and 191 of this reprint contain corrections to the previous (March 1958) reprint. These corrections are shown by a double dagger. Single asterisks indicate corrections to the original printing as shown in the 1958 reprint. These corrections are shown on pages 39, 49, 105, 157, 183, 187, 190, and 193. On page 114, table VI.2, column 13; also the first paragraph of text, and the footnote 16 have been corrected.

The corrections on page 99 occur within the two blocks in which the daggers are placed. The corrections on pages 80 through 91 occur in the line when the daggers occur in the "number of pitches column," otherwise, the correction only pertains to the daggered value. The correction on page 107 is in the daggered line. The correction on page 109 is in the daggered paragraph. On page 112, the formula in the upper right-hand corner of figure VI.2 has been revised to read:

$$\text{``}\frac{3}{8}H - (0.060 \sqrt[3]{p^2} + 0.017p)2\text{'';}$$

$$\text{the ``}\rightarrow \left|\frac{p}{8}\right| \leftarrow \text{''}$$

has been deleted from the upper part of the right-hand view in figure VI.3.

Foreword

Formerly, only those threads were identified as "Unified" which (1) had the basic Unified thread form with limits of size and tolerances based on Unified formulations, and (2) had been agreed upon as Unified by the standards bodies of Canada, the United Kingdom, and the United States. Part I of Handbook H28(1957) is based on this.

At present, all threads are identified as "Unified" if they have the basic Unified thread form with limits of size and tolerances based on Unified formulations. The essential purpose of this Supplement is to revise the screw thread designations to conform with present practice and to include thread data for additional threads which have been added to the standard screw thread series. The revision of Handbook H28(1957), Part I, in its entirety will follow later.

This Supplement also lists changes to be made in Parts II and III.

ARCHIBALD T. McPHERSON, *Chairman,*
Interdepartmental Screw Thread Committee.

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**HEADQUARTERS
DEFENSE SUPPLY AGENCY
CAMERON STATION
ALEXANDRIA, VIRGINIA**

2 AUG 1963

Mr. I. H. Fullmer, Secretary
Interdepartmental Screw Thread Committee
National Bureau of Standards
U. S. Department of Commerce
Washington 25, D. C.

Dear Mr. Fullmer:

This is in reference to your letter of 21 February 1963, File 2.05, which
forwarded, for Department of Defense signature, the approval sheet for
the 1963 supplement to NBS Handbook H28 (1957), Parts I, II, and III.

For your information the Defense Supply Agency, as administrator of the
Defense Standardization Program, has been designated to act on behalf
of the Department of Defense in approving the Handbook.

Such approval is indicated by signature on the authentication page which
is returned herewith.

Sincerely yours,

E. M. TOLLIVER
Colonel, USA
Chief, Standardization Division

2 Incl
   1. Approval Sheet
   2. Draft 1963 Revision

APPROVAL BY

THE DEPARTMENTS OF DEFENSE AND COMMERCE

The accompanying 1963 Supplement to Handbook H28(1957), Parts I, II, & III, on Screw-Thread Standards for Federal Services, submitted by the Interdepartmental Screw Thread Committee, is hereby approved for use by the Departments of Defense and Commerce.

FOR THE DEPARTMENT OF DEFENSE: FOR THE DEPARTMENT OF COMMERCE:

EDWARD TOLLIVER   A. V. ASTIN
Colonel, USA   Director
Defense Supply Agency   National Bureau of Standards

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1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES

HANDBOOK H28 (1957)

PARTS I, II, & III

PART I CHANGES

The following changes should be made in Part I:

p. 1, SECTION II. Nomenclature, Definitions, and Letter Symbols:

(Note: This section is in process of extensive revision. With reference to pars. 22 and 23, p. 5, see footnote 24, p. 102 of this Supplement.)

p. 10, 1. Introduction: Revise first sentence of first paragraph of introduction to read:

"The Unified thread standards [2] constitute the basic American standards for fastening screw threads."

p. 10, 1. Introduction: Substitute the following for the last two sentences (last eight lines) of the third paragraph:

"At present, all threads are classed as Unified if they have the basic Unified thread form and have limits of size and tolerances based on the Unified formulations."

p. 12, 2. The Unified Form of Thread: Revise to read:

"2. THE UNIFIED FORM OF THREAD

"1. Basic Form of Thread.—The Unified thread form is the basis of all thread dimensions given in the standard. The formulas for its proportions are given in table III.1 in this Supplement, together with figure III.1a in this Supplement, showing the basic profile from which the design forms are derived. Both the ISO basic profile and the American (U.S.) concept of the basic Unified thread form are shown. These are essentially alike except that in the second illustration the position of the basic minor diameter provides for the long established practice in the U.S. of considering 100 percent thread height as being equal to $3H/4$, measured from the basic major diameter.

(a) *Angle of thread.*—The basic angle of thread between the flanks of the thread, measured in an axial plane, is 60°. The line bisecting this 60° angle is perpendicular to the axis of the screw thread.

(b) *Form of crest.*—The form of the crest of external threads is flat. The crest of the basic thread form of the external thread shall be truncated from the sharp crest an amount equal to $H/8$, where H is the depth of the fundamental triangle. The form of the crest of internal threads is flat and the crest shall be truncated from the sharp crest an amount equal to $H/4$.

(c) *Rounded root forms.*—The crest clearances allowed are such as to permit rounded root forms in both the external and internal threads. Rounded roots are required in some applications and are made by tools that are purposely rounded. Otherwise, rounded roots may be the result of tool wear.

(d) *Clearance at minor diameter.*—A clearance is provided at the minor diameter of the internal thread by truncating from the sharp crest an amount equal to $H/4$.

(e) *Clearance at major diameter.*—A clearance is provided at the major diameter of the internal thread by making the thread form at the root such that its width is less than $p/8$.

"2. Design Form of External Thread.—The design form for an external Unified thread, i.e., the form of an external thread in its maximum material condition, shown in figure III.1 in this Supplement, is derived from the fundamental triangle. It is truncated at the major diameter to $H/8$. In practice, due to providing for tool crest wear at the thread roots, i.e., the minor diameter, the roots are shown as a rounded contour and cleared beyond the flat width of $p/4$ for the minimum minor diameter of the internal thread. Also, in practice, the crests of the external threads may be rounded within the confines established by the major diameter tolerance.

"3. Design Form of Internal Thread.—The design form for an internal Unified thread, i.e., the form of an internal thread in its maximum material condition, shown in figure III.1 in this Supplement, is derived from the fundamental triangle. It is similar to the basic form except that the truncation at the minor diameter is an

1

Min Major Diameter
Specified in Dimensional
Tables (Form Diameter)

INTERNAL
THREAD

$\frac{H}{8}$

$\frac{p}{8}$

p

$\frac{5H}{8}$

$\frac{H}{8}$

$\frac{3H}{8}$

H

Pitch Line

60°

$\frac{p}{4}$

$\frac{H}{4}$

$\frac{p}{2}$

$\frac{H}{4}$

$\frac{H}{4}$

90°

AXIS OF INTERNAL THREAD

EXTERNAL
THREAD

$\frac{5H}{8}$

$\frac{3H}{8}$

$\frac{H}{8}$

$\frac{p}{2}$

$\frac{p}{8}$

Pitch Line

H

60°

$\frac{p}{4}$

$\frac{17H}{24}$

$\frac{H}{12}$

p

$\frac{H}{4}$

$\frac{H}{6}$

Max Design Minor Diameter
Specified in Dimensional
Tables (See Figs. III.3
and III. 4, pp. 24 and 25,
H28(1957), Part I.)

Flanks to be Straight
Beyond H/4 from Sharp
Apex of Root.
(Form Diameter)

Rounded Root Optional

90°

AXIS OF EXTERNAL THREAD

FIGURE III.1.—*Unified internal and external screw thread design forms (maximum material condition).*

NOTE.—See table III.1 in this supplement for numerical values. In practice the crests of external threads may be rounded.

2

ISO basic profile for inch and metric threads.

* 3H/4 = 100 percent thread height

American (U.S.) symmetrical thread form from which percentages of thread height are calculated.

FIGURE III.1a.—*Basic Unified thread form; ISO basic profile and American (U.S.) symmetrical thread form*

amount equal to one-quarter of the fundamental triangle height $(H/4)$. In practice, due to providing for tool crest wear at the thread roots, i.e., the major diameter, the roots are shown as a rounded contour and cleared beyond the flat width of $p/8$ for the maximum major diameter of the internal thread.

"4. ILLUSTRATIONS.—Figure III.1 in this Supplement shows the design forms (maximum material condition) of the external and internal threads of the Unified form of thread.

"5. BASIC THREAD DATA.—The basic thread data for all standard pitches of the Unified form of thread are given in table III.1 in this Supplement."

pp. 13, 14, and 18; 3. THREAD SERIES, SYMBOLS, AND SUGGESTED APPLICATIONS: Revise to read:

3. THREAD SERIES, ORDER OF SELECTION, AND SUGGESTED APPLICATIONS

"1. THREAD SERIES DEFINITION—Thread series are groups of diameter-pitch combinations distinguished from each other by the number of threads per inch applied to series of specific diameters. The various diameter-pitch combinations of three series with graded pitches and 8 series with constant pitches are given in table III.2 in this Supplement. The symbols for designating the various thread series are shown in table III.2 in this Supplement and succeeding tables. In table III.10 in this Supplement are given the limits of size of series in table III.2 in this Supplement, but the full range is not covered in the case of the 4UN, 6UN, and 8UN series. Omissions are the secondary sizes over 2½ in. in the 4UN series, all sizes over 5 in. in the 6UN series, and all sizes over 4 in. in the 8UN series. However, the basic dimensions for these omitted sizes are given in tables III.8a, III.8b, and III.6 in this Supplement.

"2. ORDER OF SELECTION—Whenever possible, selection should be made from table III.10, Standard series limits of size—Unified screw threads, in this Supplement, preference being given to the coarse- and fine-thread series. If threads in the standard series do not meet the requirements of design, reference should be made to the selected combinations in table IV.12 in this Supplement. The third expedient is to compute the limits of size for a special diameter-pitch combination in accordance with table IV. 13, p. 99, Part I. The fourth and last resort is calculation by formula. See section IV, Part I, for formulas.

"3. UNC, COARSE-THREAD SERIES—This series is generally utilized for the bulk production of bolts, screws, nuts, and other general engineering applications. It is used in general applications for threading into lower tensile strength materials such as cast iron, mild steel, and softer materials to obtain the optimum resistance to stripping of the internal thread. It is applicable for rapid assembly or disassembly, or if corrosion or slight damage is possible. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.3 and III.10.

"4. UNF, FINE-THREAD SERIES—This series is suitable for the production of bolts, screws, nuts, and other applications where the coarse series is not applicable. External threads of this series

3

p. 12, table III.1: Revise table to read:

TABLE III.1.—*Thread data, Unified thread form (see fig. III.2)*

Threads per inch, n	Pitch, $p=1/n$	Flat at internal thread crest, $F_{cn}=p/4=0.25/n$	Flat at internal thread root and external thread crest, $F_{rn}=F_{cs}=p/8=0.125/n$	Height of sharp v-thread, $H=0.8660254/n$	Twice min truncation of internal thread root, $2f_{rn}=H/12=0.0721688/n$	Max truncation of internal thread root and external thread crest, $f_{rn}=f_{cs}=H/8=0.108253/n$	Truncation of external thread rounded root, $s_{rs}=H/6=0.144338/n$	Half addendum of external thread, $3H/16=0.162380/n$	Addendum of internal thread and truncation of internal thread crest, $h_{an}=f_{cn}=H/4=0.216506/n$	Dedendum of internal thread and addendum of external thread, $h_{dn}=h_{as}=3H/8=0.324759/n$	Height of internal thread and depth of thread engagement, $h_n=h_e=5H/8=0.541266/n$	Height of external thread and max height of internal thread, $h_s=17H/24=0.613435/n$	(a) Twice the external thread addendum, $h_b=2h_{as}=3H/4=0.649519/n$	Thread height from basic flat crest to sharp root, $7H/8=0.757772/n$	Difference between max. major and pitch diameters of internal thread, $11H/12=0.793835/n$	Double height of internal thread, $2h_n=5H/4=1.082532/n$	Double height of external thread, $17H/12=1.226846/n$
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
80	0.012500	0.00312	0.00156	0.010825+	0.00090	0.00135+	0.00180	0.00203	0.00271	0.00406	0.00677	0.00767	0.008119	0.00947	0.00992	0.01353	0.01534
72	.013889	.00347	.00174	.012028	.00100	.00150	.00200	.00226	.00301	.00451	.00752	.00852	.009021	.01052	.01103	.01504	.01704
64	.015625	.00391	.00195+	.013532	.00113	.00169	.00226	.00254	.00338	.00507	.00846	.00958	.010149	.01184	.01240	.01691	.01917
56	.017857	.00446	.00223	.015465+	.00129	.00193	.00258	.00290	.00387	.00580	.00967	.01095+	.011599	.01353	.01418	.01933	.02191
48	.020833	.00521	.00260	.018042	.00150	.00226	.00301	.00338	.00451	.00677	.01128	.01278	.013532	.01579	.01654	.02255+	.02556
44	.022727	.00568	.00284	.019682	.00164	.00246	.00328	.00369	.00492	.00738	.01230	.01394	.014762	.01722	.01804	.02460	.02788
40	.025000	.006250	.00312	.021651	.00180	.00271	.00361	.00406	.00541	.00812	.01353	.01534	.016238	.01894	.01985-	.02706	.03067
36	.027778	.00694	.00347	.024056	.00200	.00301	.00401	.00451	.00601	.00902	.01504	.01704	.018042	.02105-	.02205+	.03007	.03408
32	.031250	.00781	.00391	.027063	.00226	.00338	.00451	.00507	.00677	.01015-	.01691	.01917	.020297	.02368	.02481	.03383	.03834
28	.035714	.00893	.00446	.030929	.00258	.00387	.00515+	.00580	.00773	.01160	.01933	.02191	.023197	.02706	.02835+	.03866	.04382
27	.037037	.00926	.00463	.032075+	.00267	.00401	.00535-	.00601	.00802	.01203	.02005-	.02272	.024056	.02807	.02940	.04009	.04544
24	.041667	.01042	.00521	.036084	.00301	.00451	.00601	.00677	.00902	.01353	.02255+	.02556	.027063	.03157	.03308	.04511	.05112
20	.050000	.01250	.006250	.043301	.00361	.00541	.00722	.00812	.01083	.01624	.02706	.03067	.032476	.03789	.03969	.05413	.06134
18	.055556	.01389	.00694	.048113	.00401	.00601	.00802	.00902	.01203	.01804	.03007	.03408	.036084	.04210	.04410	.06014	.06816
16	.062500	.01562	.00781	.054127	.00451	.00677	.00902	.01015-	.01353	.02030	.03383	.03834	.040595-	.04736	.04962	.06766	.07668
14	.071429	.01786	.00893	.061859	.00515+	.00773	.01031	.01160	.01546	.02320	.03866	.04382	.046394	.05413	.05670	.07732	.08763
13	.076923	.01923	.00962	.066617	.00555+	.00833	.01110	.01249	.01665+	.02498	.04164	.04719	.049963	.05829	.06107	.08327	.09437
12	.083333	.02083	.01042	.072169	.00601	.00902	.01203	.01353	.01804	.02706	.04511	.05112	.054127	.06315-	.06615+	.09021	.10224
11½	.086957	.02174	.01087	.075307	.00628	.00941	.01255+	.01412	.01883	.02824	.04707	.05334	.056480	.06589	.06903	.09413	.10668
11	.090909	.02273	.01136	.078730	.00656	.00984	.01312	.01476	.01968	.02952	.04921	.05577	.059047	.06889	.07217	.09841	.11153
10	.100000	.02500	.01250	.086603	.00722	.01083	.01443	.01624	.02165+	.03248	.05413	.06134	.064952	.07578	.07939	.10825+	.12269
9	.111111	.02778	.01389	.096225-	.00802	.01203	.01604	.01804	.02406	.03608	.06014	.06816	.072169	.08420	.08821	.12028	.13632
8	.125000	.031250	.01562	.108253	.00902	.01353	.01804	.02030	.02705	.04059	.06766	.07668	.081190	.09472	.09923	.13532	.15336
7	.142857	.03571	.01786	.123718	.01031	.01546	.02062	.02320	.03093	.04639	.07732	.08763	.092788	.10825+	.11341	.15465-	.17527
6	.166667	.04167	.02083	.144338	.01203	.01804	.02406	.02706	.03608	.05413	.09021	.10224	.108253	.12630	.13231	.18042	.20448
5	.200000	.05000	.02500	.173205+	.01443	.02165+	.02887	.03248	.04330	.06496+	.10825+	.12269	.129904	.15155+	.15877	.21651	.24537
4½	.222222	.05556	.02778	.192450	.01604	.02406	.03208	.03608	.04811	.07217	.12028	.13632	.144338	.16839	.17641	.24056	.27264
4	.250000	.06250	.031250	.216506	.01804	.02706	.03608	.04059	.05413	.08119	.13532	.15336	.162380	.18944	.19846	.27063	.30672

a This is taken as 100 percent thread height. It is equivalent to the "basic height" h of the original American National form.

4

have greater tensile stress area than comparable sizes of the coarse series. The fine series is suitable when the resistance to stripping of both external and mating internal threads equals or exceeds the tensile load carrying capacity of the externally threaded member. It is also used where the length of engagement is short, where a smaller lead angle is desired, or where the wall thickness demands a fine pitch. It may also be used for threading into lower strength materials where maximum strength of the external thread is not required; otherwise the length of engagement must be selected to meet the above required strength conditions.

Fine threads up to and including 1 inch size are suitable for screw, bolt, and nut, and other threaded fastener applications. Sizes over 1 inch may not be suitable unless the mating materials are compatible as outlined above. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.4 and III.10.

"5. UNEF, Extra-Fine Thread Series—This series is applicable where even finer pitches of threads are desirable for short lengths of engagement and for thin-walled tubes, nuts, ferrules, or couplings. It is also generally applicable under the conditions stated above for the fine threads. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.5 and III.10.

"6. UN, Constant Pitch Series—The various constant-pitch series with 4, 6, 8, 12, 16, 20, 28, and 32 threads per inch, given in this Supplement in table III.2, offer a comprehensive range of diameter-pitch combinations for those purposes where the threads in the UNC, UNF, and UNEF series do not meet the particular requirements of the design. The constant pitch series have application on parts that are repeatedly assembled and disassembled or where it might be advantageous to rethread oversize to recondition the threaded portions of the parts. Whenever a thread in a constant-pitch series also appears in the UNC, UNF, or UNEF series the symbols, tolerances, and limits of size of those standard series are applicable. When selecting threads from these constant-pitch series, preference should be given whenever possible to those tabulated in the 8-, 12-, or 16-thread series. The basic dimensions for the 4-, 6-, 20-, 28-, and 32-thread series are shown in this Supplement in tables III.8a to III.8e.

(a) 8UN, 8-thread series—The 8UN series is a uniform-pitch series for large diameters or for use as a compromise between the coarse- and fine-thread series. Although originally intended for high-pressure-joint bolts and nuts, it is now widely used as a substitute for the coarse-thread series for diameters larger than 1 in. The basic dimen-

sions for this series are shown in table III.6 in this Supplement.

(b) 12UN, 12-thread series—The 12UN series is a uniform pitch series for large diameters requiring threads of medium-fine pitch. Although originally intended for boiler practice, it is now used as a continuation of the fine-thread series for diameters larger than 1½ in. The basic dimensions for this series are shown in table III.7 in this Supplement.

(c) 16UN, 16-thread series—The 16UN series is a uniform pitch series for large diameters requiring fine-pitch threads. It is suitable for adjusting collars and retaining nuts, and also serves as a continuation of the extra-fine-thread series for diameters larger than 1¹¹⁄₁₆ (1.6875) in. The basic dimensions for this series are shown in table III.8 in this Supplement.

"7. High-temperature, High-strength Applications—For these applications the coarse-thread series is recommended in sizes from ¼ to 1 in. and the 8-thread series in sizes over 1 in. Limits of size are given in table III.10 in this Supplement. Some high-temperature applications involving special physical characteristics or conditions may require modification of thread dimensions. See first full paragraph in second column of p. 23, Part I and (e) Method of designating threads having modified crests, p. 19 in this Supplement.

"8. Selected Combinations of UNS Threads—Thread data are tabulated in table IV.12, p. 92 in this Supplement for some selected combinations of diameter and pitch of Unified special screw threads, designated UNS, with pitch diameter tolerances based on a length of thread engagement of 9 times the pitch. The pitch diameter limits are applicable to a length of engagement of from 5 to 15 times the pitch. (This should not be confused with the length of thread on mating parts, as it may exceed the length of engagement by a considerable amount.)

"9. Fine Threads for Thin-Wall Tubing—The limits of size for a 27-thread series, ranging from ¼ to 1 in. nominal size, are included in table IV.12, p. 92 in this Supplement. These threads are recommended for general use on thin-wall tubing. For more detailed information see part II of Handbook H28 (par. 7, page 11 of the 1957 issue).

"10. Threads of Special Diameters, Pitches, and Lengths of Engagement.—For information on special threads, see section IV, page 74, Part I of H28 (1957). (For changes made in section IV by this Supplement, see pp. 91–96.)"

pp. 15–20: Delete tables III.2 to III.9, inclusive. Add tables III.2, III.3, III.4, III.5, III.6, III.7, III.8, III.8a, III.8b, III.8c, III.8d, III.8e, and III.9, which follow.

(Next text on p. 16.)

TABLE III.2.—*Unified standard screw thread series*

Nominal size		Nominal size and basic major diameter	Threads per inch											Nominal size
			Series with graded pitches			Series with constant pitches								
Primary	Secondary		Coarse UNC	Fine UNF	Extra fine UNEF	4UN	6UN	8UN	12UN	16UN	20UN	28UN	32UN	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No. in.	*No. in.*	*in.*												*No. in.*
0		.060	------	80	------									0
	1	.073	64	72	------									1
2		.086	56	64	------									2
	3	.099	48	56	------									3
4		.112	40	48	------									4
5		.125	40	44	------									5
6		.138	32	40	------								UNC	6
8		.164	32	36	------								UNC	8
10		.190	24	32	------								UNF	10
	12	.216	24	28	32							UNF	UNEF	12
1/4		.250	20	28	32						UNC	UNF	UNEF	1/4
5/16		.3125	18	24	32						20	28	UNEF	5/16
3/8		.375	16	24	32					UNC	20	28	UNEF	3/8
7/16		.4375	14	20	28					16	UNF	UNEF	32	7/16
1/2		.500	13	20	28					16	UNF	UNEF	32	1/2
9/16		.5625	12	18	24				UNC	16	20	28	32	9/16
5/8		.625	11	18	24				12	16	20	28	32	5/8
	11/16	.6875	------	------	24				12	16	20	28	32	11/16
3/4		.750	10	16	20				12	UNF	UNEF	28	32	3/4
	13/16	.8125	------	------	20				12	16	UNEF	28	32	13/16
7/8		.875	9	14	20				12	16	UNEF	28	32	7/8
	15/16	.9375	------	------	20				12	16	UNEF	28	32	15/16
1		1.000	8	12	20		UNC	UNF	16	UNEF	28	32		1
	1 1/16	1.0625	------	------	18		8	12	16	20	28			1 1/16
1 1/8		1.125	7	12	18		8	UNF	16	20	28			1 1/8
	1 3/16	1.1875	------	------	18		8	12	16	20	28			1 3/16
1 1/4		1.250	7	12	18		8	UNF	16	20	28			1 1/4
	1 5/16	1.3125	------	------	18		8	12	16	20	28			1 5/16
1 3/8		1.375	6	12	18		UNC	8	UNF	16	20	28		1 3/8
	1 7/16	1.4375	------	------	18		6	8	12	16	20	28		1 7/16
1 1/2		1.500	6	12	18		UNC	8	UNF	16	20	28		1 1/2
	1 9/16	1.5625	------	------	18		6	8	12	16	20			1 9/16
1 5/8		1.625	------	------	18		6	8	12	16	20			1 5/8
	1 11/16	1.6875	------	------	18		6	8	12	16	20			1 11/16
1 3/4		1.750	5	------	------		6	8	12	16	20			1 3/4
	1 13/16	1.8125	------	------	------		6	8	12	16	20			1 13/16
1 7/8		1.875	------	------	------		6	8	12	16	20			1 7/8
	1 15/16	1.9375	------	------	------		6	8	12	16	20			1 15/16
2		2.000	4 1/2	------	------		6	8	12	16	20			2
	2 1/8	2.125	------	------	------		6	8	12	16	20			2 1/8
2 1/4		2.250	4 1/2	------	------		6	8	12	16	20			2 1/4
	2 3/8	2.375	------	------	------		6	8	12	16	20			2 3/8
2 1/2		2.500	4	------	------	UNC	6	8	12	16	20			2 1/2
	2 5/8	2.625	------	------	------	4	6	8	12	16	20			2 5/8
2 3/4		2.750	4	------	------	UNC	6	8	12	16	20			2 3/4
	2 7/8	2.875	------	------	------	4	6	8	12	16	20			2 7/8
3		3.000	4	------	------	UNC	6	8	12	16	20			3
	3 1/8	3.125	------	------	------	4	6	8	12	16				3 1/8
3 1/4		3.250	4	------	------	UNC	6	8	12	16				3 1/4
	3 3/8	3.375	------	------	------	4	6	8	12	16				3 3/8
3 1/2		3.500	4	------	------	UNC	6	8	12	16				3 1/2
	3 5/8	3.625	------	------	------	4	6	8	12	16				3 5/8
3 3/4		3.750	4	------	------	UNC	6	8	12	16				3 3/4
	3 7/8	3.875	------	------	------	4	6	8	12	16				3 7/8
4		4.000	4	------	------	UNC	6	8	12	16				4
	4 1/8	4.125	------	------	------	4	6	8	12	16				4 1/8
4 1/4		4.250	------	------	------	4	6	8	12	16				4 1/4
	4 3/8	4.375	------	------	------	4	6	8	12	16				4 3/8
4 1/2		4.500	------	------	------	4	6	8	12	16				4 1/2
	4 5/8	4.625	------	------	------	4	6	8	12	16				4 5/8
4 3/4		4.750	------	------	------	4	6	8	12	16				4 3/4
	4 7/8	4.875	------	------	------	4	6	8	12	16				4 7/8
5		5.000	------	------	------	4	6	8	12	16				5
	5 1/8	5.125	------	------	------	4	6	8	12	16				5 1/8
5 1/4		5.250	------	------	------	4	6	8	12	16				5 1/4
	5 3/8	5.375	------	------	------	4	6	8	12	16				5 3/8
5 1/2		5.500	------	------	------	4	6	8	12	16				5 1/2
	5 5/8	5.625	------	------	------	4	6	8	12	16				5 5/8
5 3/4		5.750	------	------	------	4	6	8	12	16				5 3/4
	5 7/8	5.875	------	------	------	4	6	8	12	16				5 7/8
6		6.000	------	------	------	4	6	8	12	16				6

[a] Number or fractional nominal sizes are given in cols. 1, 2, and 15. Decimal nominal sizes are given in col. 3.

Table III.3.—Coarse thread series, basic dimensions, UNC

Nominal size		Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s [a]	Minor diameter, internal threads, K_n [a]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, [b] $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$
Primary	Secondary									
1	2	3	4	5	6	7	8		9	10
No. in.	*No.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
	1	.073	64	0.0629	0.0538	0.0561	4	31	0.00218	0.00263
2		.086	56	.0744	.0641	.0667	4	22	.00310	.00370
	3	.099	48	.0855	.0734	.0764	4	26	.00406	.00487
4		.112	40	.0958	.0813	.0849	4	45	.00496	.00604
5		.125	40	.1088	.0943	.0979	4	11	.00672	.00796
6		.138	32	.1177	.0997	.1042	4	50	.00745	.00909
8		.164	32	.1437	.1257	.1302	3	58	.01196	.0140
10		.190	24	.1629	.1389	.1449	4	39	.01450	.0175
	12	.216	24	.1889	.1649	.1709	4	1	.0206	.0242
¼		.250	20	.2175	.1887	.1959	4	11	.0269	.0318
⁵⁄₁₆		.3125	18	.2764	.2443	.2524	3	40	.0454	.0524
⅜		.375	16	.3344	.2983	.3073	3	24	.0678	.0775
⁷⁄₁₆		.4375	14	.3911	.3499	.3602	3	20	.0933	.1063
½		.500	13	.4500	.4056	.4167	3	7	.1257	.1419
⁹⁄₁₆		.5625	12	.5084	.4603	.4723	2	59	.162	.182
⅝		.625	11	.5660	.5135	.5266	2	56	.202	.226
¾		.750	10	.6850	.6273	.6417	2	40	.302	.334
⅞		.875	9	.8028	.7387	.7547	2	31	.419	.462
1		1.000	8	.9188	.8466	.8647	2	29	.551	.606
1⅛		1.125	7	1.0322	.9497	.9704	2	31	.693	.763
1¼		1.250	7	1.1572	1.0747	1.0954	2	15	.890	.969
1⅜		1.375	6	1.2667	1.1705	1.1946	2	24	1.054	1.155
1½		1.500	6	1.3917	1.2955	1.3196	2	11	1.294	1.405
1¾		1.750	5	1.6201	1.5046	1.5335	2	15	1.74	1.90
2		2.000	4½	1.8557	1.7274	1.7594	2	11	2.30	2.50
2¼		2.250	4½	2.1057	1.9774	2.0094	1	55	3.02	3.25
2½		2.500	4	2.3376	2.1933	2.2294	1	57	3.72	4.00
2¾		2.750	4	2.5876	2.4433	2.4794	1	46	4.62	4.93
3		3.000	4	2.8376	2.6933	2.7294	1	36	5.62	5.97
3¼		3.250	4	3.0876	2.9433	2.9794	1	29	6.72	7.10
3½		3.500	4	3.3376	3.1933	3.2294	1	22	7.92	8.33
3¾		3.750	4	3.5876	3.4433	3.4794	1	16	9.21	9.66
4		4.000	4	3.8376	3.6933	3.7284	1	11	10.61	11.08

[a] Design form. See fig. III.1, p. 2 in this Supplement.
[b] See formula under definition of tensile stress area on p. 102 in this Supplement.

Table III.4.—Fine thread series, basic dimensions, UNF

Nominal size [a]		Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, [c] $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$
Primary	Secondary									
1	2	3	4	5	6	7	8		9	10
No. in.	*No.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
0		.060	80	0.0519	0.0447	0.0465	4	23	0.00151	0.00180
	1	.073	72	.0640	.0560	.0580	3	57	.00237	.00278
2		.086	64	.0759	.0668	.0691	3	45	.00339	.00394
	3	.099	56	.0874	.0771	.0797	3	43	.00451	.00523
4		.112	48	.0985	.0864	.0894	3	51	.00566	.00661
5		.125	44	.1102	.0971	.1004	3	45	.00716	.00830
6		.138	40	.1218	.1073	.1109	3	44	.00874	.01015
8		.164	36	.1460	.1299	.1339	3	28	.01285	.01474
10		.190	32	.1697	.1517	.1562	3	21	.0175	.0200
	12	.216	28	.1928	.1722	.1773	3	22	.0226	.0258
¼		.250	28	.2268	.2062	.2113	2	52	.0326	.0364
⁵⁄₁₆		.3125	24	.2854	.2614	.2674	2	40	.0524	.0580
⅜		.375	24	.3479	.3239	.3299	2	11	.0809	.0878
⁷⁄₁₆		.4375	20	.4050	.3762	.3834	2	15	.1090	.1187
½		.500	20	.4675	.4387	.4459	1	57	.1486	.1599
⁹⁄₁₆		.5625	18	.5264	.4943	.5024	1	55	.189	.203
⅝		.625	18	.5889	.5568	.5649	1	43	.240	.256
¾		.750	16	.7094	.6733	.6823	1	36	.351	.373
⅞		.875	14	.8286	.7874	.7977	1	34	.480	.509
1		1.000	12	.9459	.8978	.9098	1	36	.625	.663
1⅛		1.125	12	1.0709	1.0228	1.0348	1	25	.812	.856
1¼		1.250	12	1.1959	1.1478	1.1598	1	16	1.024	1.073
1⅜		1.375	12	1.3209	1.2728	1.2848	1	9	1.260	1.315
1½		1.500	12	1.4459	1.3978	1.4098	1	3	1.521	1.581

[a] For sizes larger than 1½ in., use the 12-thread series. See table III.7 in this Supplement.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.5.—*Extra-fine thread series, basic dimensions,* UNEF

Nominal size — Primary	Nominal size — Secondary[a]	Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s[b]	Minor diameter, internal threads, K_n[b]	Lead angle at basic pitch diameter, λ — deg	— min	Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$[c]
1	2	3	4	5	6	7	8		9	10
in.	*No.* 12 *in.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
	12	.216	32	0.1957	0.1777	0.1822	2	55	0.0242	0.0270
1/4		.250	32	.2297	.2117	.2162	2	29	.0344	.0379
5/16		.3125	32	.2922	.2742	.2787	1	57	.0581	.0625
3/8		.375	32	.3547	.3367	.3412	1	36	.0878	.0932
7/16		.4375	28	.4143	.3937	.3988	1	34	.1201	.1274
1/2		.500	28	.4768	.4562	.4613	1	22	.162	.170
9/16		.5625	24	.5354	.5114	.5174	1	25	.203	.214
5/8		.625	24	.5979	.5739	.5799	1	16	.256	.268
	11/16	.6875	24	.6604	.6364	.6424	1	9	.315	.329
3/4		.750	20	.7175	.6887	.6959	1	16	.369	.386
	13/16	.8125	20	.7800	.7512	.7584	1	10	.439	.458
7/8		.875	20	.8425	.8137	.8209	1	5	.515	.536
	15/16	.9375	20	.9050	.8762	.8834	1	0	.598	.620
1		1.000	20	.9675	.9387	.9459	0	57	.687	.711
	1 1/16	1.0625	18	1.0264	.9943	1.0024	0	59	.770	.799
1 1/8		1.125	18	1.0889	1.0568	1.0649	0	56	.871	.901
	1 3/16	1.1875	18	1.1514	1.1193	1.1274	0	53	.977	1.009
1 1/4		1.250	18	1.2139	1.1818	1.1899	0	50	1.090	1.123
	1 5/16	1.3125	18	1.2764	1.2443	1.2524	0	48	1.208	1.244
1 3/8		1.375	18	1.3389	1.3068	1.3149	0	45	1.333	1.370
	1 7/16	1.4375	18	1.4014	1.3693	1.3774	0	43	1.464	1.503
1 1/2		1.500	18	1.4639	1.4318	1.4399	0	42	1.60	1.64
	1 9/16	1.5625	18	1.5264	1.4943	1.5024	0	40	1.74	1.79
1 5/8		1.625	18	1.5889	1.5568	1.5649	0	38	1.89	1.94
	1 11/16	1.6875	18	1.6514	1.6193	1.6274	0	37	2.05	2.10

[a] For sizes larger than 1 11/16, 1.6875, inch use 16-thread series. See table III.8 in this Supplement.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.6.—*8-thread series, basic dimensions,* 8UN

Nominal size — Primary	Nominal size — Secondary	Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s[b]	Minor diameter, internal threads, K_n[b]	Lead angle at basic pitch diameter, λ — deg	— min	Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$[c]
1	2	3	4	5	6	7		8	9
in.[a] 1	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
1		1.000	0.9188	0.8466	0.8647	2	29	0.551	0.606
	1 1/16	1.0625	.9813	.9091	.9272	2	19	.636	.695
1 1/8		1.125	1.0438	.9716	.9897	2	11	.728	.790
	1 3/16	1.1875	1.1063	1.0341	1.0522	2	4	.825	.892
1 1/4		1.250	1.1688	1.0966	1.1147	1	57	.929	1.000
	1 5/16	1.3125	1.2313	1.1591	1.1772	1	51	1.039	1.114
1 3/8		1.375	1.2938	1.2216	1.2397	1	46	1.155	1.233
	1 7/16	1.4375	1.3563	1.2841	1.3022	1	41	1.277	1.360
1 1/2		1.500	1.4188	1.3466	1.3647	1	36	1.405	1.492
	1 9/16	1.5625	1.4813	1.4091	1.4272	1	32	1.54	1.63
1 5/8		1.625	1.5438	1.4716	1.4897	1	29	1.68	1.78
	1 11/16	1.6875	1.6063	1.5341	1.5522	1	25	1.83	1.93
1 3/4		1.750	1.6688	1.5966	1.6147	1	22	1.98	2.08
	1 13/16	1.8125	1.7313	1.6591	1.6772	1	19	2.14	2.25
1 7/8		1.875	1.7938	1.7216	1.7397	1	16	2.30	2.41
	1 15/16	1.9375	1.8563	1.7841	1.8022	1	14	2.47	2.59
2		2.000	1.9188	1.8466	1.8647	1	11	2.65	2.77
	2 1/8	2.125	2.0438	1.9716	1.9897	1	7	3.03	3.15
2 1/4		2.250	2.1688	2.0966	2.1147	1	3	3.42	3.56
	2 3/8	2.375	2.2938	2.2216	2.2397	1	0	3.85	3.99
2 1/2		2.500	2.4188	2.3466	2.3647	0	57	4.29	4.44
	2 5/8	2.625	2.5438	2.4716	2.4897	0	54	4.76	4.92
2 3/4		2.750	2.6688	2.5966	2.6147	0	51	5.26	5.43
	2 7/8	2.875	2.7938	2.7216	2.7397	0	49	5.78	5.95
3		3.000	2.9188	2.8466	2.8647	0	47	6.32	6.51
	3 1/8	3.125	3.0438	2.9716	2.9897	0	45	6.89	7.08
3 1/4		3.250	3.1688	3.0966	3.1147	0	43	7.49	7.69
	3 3/8	3.375	3.2938	3.2216	3.2397	0	42	8.11	8.31

See footnotes at end of table.

TABLE III.6.—*8-thread series, basic dimensions, 8UN*—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ [b]		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
3½		3.500	3.4188	3.3466	3.3647	0	40	8.75	8.96
	3⅝	3.625	3.5438	3.4716	3.4897	0	39	9.42	9.64
3¾		3.750	3.6688	3.5966	3.6147	0	37	10.11	10.34
	3⅞	3.875	3.7938	3.7216	3.7397	0	36	10.83	11.06
4		4.000	3.9188	3.8466	3.8647	0	35	11.57	11.81
	4⅛	4.125	4.0438	3.9716	3.9897	0	34	12.34	12.59
4¼		4.250	4.1688	4.0966	4.1147	0	33	13.12	13.38
	4⅜	4.375	4.2938	4.2216	4.2397	0	32	13.94	14.21
4½		4.500	4.4188	4.3466	4.3647	0	31	14.78	15.1
	4⅝	4.625	4.5438	4.4716	4.4897	0	30	15.6	15.9
4¾		4.750	4.6688	4.5966	4.6147	0	29	16.5	16.8
	4⅞	4.875	4.7938	4.7216	4.7397	0	29	17.4	17.7
5		5.000	4.9188	4.8466	4.8647	0	28	18.4	18.7
	5⅛	5.125	5.0438	4.9716	4.9897	0	27	19.3	19.7
5¼		5.250	5.1688	5.0966	5.1147	0	26	20.3	20.7
	5⅜	5.375	5.2938	5.2216	5.2397	0	26	21.3	21.7
5½		5.500	5.4188	5.3466	5.3647	0	25	22.4	22.7
	5⅝	5.625	5.5438	5.4716	5.4897	0	25	23.4	23.8
5¾		5.750	5.6688	5.5966	5.6147	0	24	24.5	24.9
	5⅞	5.875	5.7938	5.7216	5.7397	0	24	25.6	26.0
6		6.000	5.9188	5.8466	5.8647	0	23	26.8	27.1

[a] This is a standard size of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.7.—*12-thread series, basic dimensions, 12UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
[a] 9⁄16		.5625	0.5084	0.4603	0.4723	2	59	0.162	0.182
⅝		.625	.5709	.5228	.5348	2	40	.210	.232
	11⁄16	.6875	.6334	.5853	.5973	2	24	.264	.289
¾		.750	.6959	.6478	.6598	2	11	.323	.351
	13⁄16	.8125	.7584	.7103	.7223	2	0	.390	.420
⅞		.875	.8209	.7728	.7848	1	51	.462	.495
	15⁄16	.9375	.8834	8353	.8473	1	43	.540	.576
[a] 1		1.000	.9459	.8978	.9098	1	36	.625	.663
	1 1⁄16	1.0625	1.0084	.9603	.9723	1	30	.715	.756
[a] 1⅛		1.125	1.0709	1.0228	1.0348	1	25	.812	.856
	1 3⁄16	1.1875	1.1334	1.0853	1.0973	1	20	.915	.961
[a] 1¼		1.250	1.1959	1.1478	1.1598	1	16	1.024	1.073
	1 5⁄16	1.3125	1.2584	1.2103	1.2223	1	12	1.139	1.191
[a] 1⅜		1.375	1.3209	1.2728	1.2848	1	9	1.260	1.315
	1 7⁄16	1.4375	1.3834	1.3353	1.3473	1	6	1.388	1.445
[a] 1½		1.500	1.4459	1.3978	1.4098	1	3	1.52	1.58
	1 9⁄16	1.5625	1.5084	1.4603	1.4723	1	0	1.66	1.72
1⅝		1.625	1.5709	1.5228	1.5348	0	58	1.81	1.87
	1 11⁄16	1.6875	1.6334	1.5853	1.5973	0	56	1.96	2.03
1¾		1.750	1.6959	1.6478	1.6598	0	54	2.12	2.19
	1 13⁄16	1.8125	1.7584	1.7103	1.7223	0	52	2.28	2.35
1⅞		1.875	1.8209	1.7728	1.7848	0	50	2.45	2.53
	1 15⁄16	1.9375	1.8834	1.8353	1.8473	0	48	2.63	2.71
2		2.000	1.9459	1.8978	1 9098	0	47	2.81	2.89
	2⅛	2.125	2.0709	2.0228	2.0348	0	44	3.19	3.28
2¼		2.250	2.1959	2.1478	2.1598	0	42	3.60	3.69
	2⅜	2.375	2.3209	2.2728	2.2848	0	39	4.04	4.13
2½		2.500	2.4459	2.3978	2.4098	0	37	4.49	4.60
	2⅝	2.625	2.5709	2.5228	2.5348	0	35	4.97	5.08
2¾		2.750	2.6959	2.6478	2.6598	0	34	5.48	5.59
	2⅞	2.875	2.8209	2.7728	2.7848	0	32	6.01	6.13
3		3.000	2.9459	2.8978	2.9098	0	31	6.57	6.69
	3⅛	3.125	3.0709	3.0228	3.0348	0	30	7.15	7.28
3¼		3.250	3.1959	3.1478	3.1598	0	29	7.75	7.89
	3⅜	3.375	3.3209	3.2728	3.2848	0	27	8.38	8.52

See footnotes at end of table.

Table III. 7.—*12-thread series, basic dimensions, 12UN*—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at D−2h_b	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary					deg	min		
1	2	3	4	5	6	7		8	9
in.	in.	in.	in.	in.	in.	deg	min	in.²	in.²
3½		3.500	3.4459	3.3978	3.4098	0	26	9.03	9.18
	3⅝	3.625	3.5709	3.5228	3.5348	0	26	9.71	9.86
3¾		3.750	3.6959	3.6478	3.6598	0	25	10.42	10.57
	3⅞	3.875	3.8209	3.7728	3.7848	0	24	11.14	11.30
4		4.000	3.9459	3.8978	3.9098	0	23	11.90	12.06
	4⅛	4.125	4.0709	4.0228	4.0348	0	22	12.67	12.84
4¼		4.250	4.1959	4.1478	4.1598	0	22	13.47	13.65
	4⅜	4.375	4.3209	4.2728	4.2848	0	21	14.30	14.48
4½		4.500	4.4459	4.3978	4.4098	0	21	15.1	15.3
	4⅝	4.625	4.5709	4.5228	4.5348	0	20	16.0	16.2
4¾		4.750	4.6959	4.6478	4.6598	0	19	16.9	17.1
	4⅞	4.875	4.8209	4.7728	4.7848	0	19	17.8	18.0
5		5.000	4.9459	4.8978	4.9098	0	18	18.8	19.0
	5⅛	5.125	5.0709	5.0228	5.0348	0	18	19.8	20.0
5¼		5.250	5.1959	5.1478	5.1598	0	18	20.8	21.0
	5⅜	5.375	5.3209	5.2728	5.2848	0	17	21.8	22.0
5½		5.500	5.4459	5.3978	5.4098	0	17	22.8	23.1
	5⅝	5.625	5.5709	5.5228	5.5348	0	16	23.9	24.1
5¾		5.750	5.6959	5.6478	5.6598	0	16	25.0	25.2
	5⅞	5.875	5.8209	5.7728	5.7848	0	16	26.1	26.4
6		6.000	5.9459	5.8978	5.9098	0	15	27.3	27.5

[a] These are standard sizes of the UNC or UNF series.
[b] Design form.   See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

Table III.8.—*16-thread series, basic dimensions, 16UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at D−2h_b	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary					deg	min		
1	2	3	4	5	6	7		8	9
in.	in.	in.	in.	in.	in.	deg	min	in.²	in.²
⅜ [a]		.375	0.3344	0.2983	0.3073	3	24	0.0678	0.0775
7/16		.4375	.3969	.3608	.3698	2	52	.0997	.1114
½		.500	.4594	.4233	.4323	2	29	.1378	.151
9/16		.5625	.5219	.4858	.4948	2	11	.182	.198
⅝		.625	.5844	.5483	.5573	1	57	.232	.250
	1 1/16	.6875	.6469	.6108	.6198	1	46	.289	.308
¾ [a]		.750	.7094	.6733	.6823	1	36	.351	.373
	1 3/16	.8125	.7719	.7358	.7448	1	29	.420	.444
⅞		.875	.8344	.7983	.8073	1	22	.495	.521
	1 5/16	.9375	.8969	.8608	.8698	1	16	.576	.604
1		1.000	.9594	.9233	.9323	1	11	.663	.693
	1 1/16	1.0625	1.0219	.9858	.9948	1	7	.756	.788
1⅛		1.125	1.0844	1.0483	1.0573	1	3	.856	.889
	1 3/16	1.1875	1.1469	1.1108	1.1198	1	0	.961	.997
1¼		1.250	1.2094	1.1733	1.1823	0	57	1.073	1.111
	1 5/16	1.3125	1.2719	1.2358	1.2448	0	54	1.191	1.230
1⅜		1.375	1.3344	1.2983	1.3073	0	51	1.315	1.356
	1 7/16	1.4375	1.3969	1.3608	1.3698	0	49	1.445	1.488
1½		1.500	1.4594	1.4233	1.4323	0	47	1.58	1.63
	1 9/16	1.5625	1.5219	1.4858	1.4948	0	45	1.72	1.77
1⅝		1.625	1.5844	1.5483	1.5573	0	43	1.87	1.92
	1 11/16	1.6875	1.6469	1.6108	1.6198	0	42	2.03	2.08
1¾		1.750	1.7094	1.6733	1.6823	0	40	2.19	2.24
	1 13/16	1.8125	1.7719	1.7358	1.7448	0	39	2.35	2.41
1⅞		1.875	1.8344	1.7983	1.8073	0	37	2.53	2.58
	1 15/16	1.9375	1.8969	1.8608	1.8698	0	36	2.71	2.77
2		2.000	1.9594	1.9233	1.9323	0	35	2.89	2.95
	2⅛	2.125	2.0844	2.0483	2.0573	0	33	3.28	3.35
2¼		2.250	2.2094	2.1733	2.1823	0	31	3.69	3.76
	2⅜	2.375	2.3344	2.2983	2.3073	0	29	4.13	4.21
2½		2.500	2.4594	2.4233	2.4323	0	28	4.60	4.67
	2⅝	2.625	2.5844	2.5483	2.5573	0	26	5.08	5.16
2¾		2.750	2.7094	2.6733	2.6823	0	25	5.59	5.68
	2⅞	2.875	2.8344	2.7983	2.8073	0	24	6.13	6.22

See footnotes at end of table.

TABLE III. 8.—*16-thread series, basic dimensions, 16UN*—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
						deg	min		
in.	*in.*	*in.*	*in.*	*in.*	*in.*			*in.²*	*in.²*
3		3.000	2.9594	2.9233	2.9323	0	23	6.69	6.78
	3⅛	3.125	3.0844	3.0483	3.0573	0	22	7.28	7.37
3¼		3.250	3.2094	3.1733	3.1823	0	21	7.89	7.99
	3⅜	3.375	3.3344	3.2983	3.3073	0	21	8.52	8.63
3½		3.500	3.4594	3.4233	3.4323	0	20	9.18	9.29
	3⅝	3.625	3.5844	3.5483	3.5573	0	19	9.86	9.98
3¾		3.750	3.7094	3.6733	3.6823	0	18	10.57	10.69
	3⅞	3.875	3.8344	3.7983	3.8073	0	18	11.30	11.43
4		4.000	3.9594	3.9233	3.9323	0	17	12.06	12.19
	4⅛	4.125	4.0844	4.0483	4.0573	0	17	12.84	12.97
4¼		4.250	4.2094	4.1733	4.1823	0	16	13.65	13.78
	4⅜	4.375	4.3344	4.2983	4.3073	0	16	14.48	14.62
4½		4.500	4.4594	4.4233	4.4323	0	15	15.34	15.5
	4⅝	4.625	4.5844	4.5483	4.5573	0	15	16.2	16.4
4¾		4.750	4.7094	4.6733	4.6823	0	15	17.1	17.3
	4⅞	4.875	4.8344	4.7983	4.8073	0	14	18.0	18.2
5		5.000	4.9594	4.9233	4.9323	0	14	19.0	19.2
	5⅛	5.125	5.0844	5.0483	5.0573	0	13	20.0	20.1
5¼		5.250	5.2094	5.1733	5.1823	0	13	21.0	21.1
	5⅜	5.375	5.3344	5.2983	5.3073	0	13	22.0	22.2
5½		5.500	5.4594	5.4233	5.4323	0	13	23.1	23.2
	5⅝	5.625	5.5844	5.5483	5.5573	0	12	24.1	24.3
5¾		5.750	5.7094	5.6733	5.6823	0	12	25.2	25.4
	5⅞	5.875	5.8344	5.7983	5.8073	0	12	26.4	26.5
6		6.000	5.9594	5.9233	5.9323	0	11	27.5	27.7

[a] These are standard sizes of the UNC or UNF Series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8a.—*4-thread series, basic dimensions, 4UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
						deg	min		
in.	*in.*	*in.*	*in.*	*in.*	*in.*			*in.²*	*in.²*
[a] 2½		2.500	2.3376	2.1933	2.2294	1	57	3.72	4.00
	2⅝	2.625	2.4626	2.3183	2.3544	1	51	4.16	4.45
[a] 2¾		2.750	2.5876	2.4433	2.4794	1	46	4.62	4.93
	2⅞	2.875	2.7126	2.5683	2.6044	1	41	5.11	5.44
[a] 3		3.000	2.8376	2.6933	2.7294	1	36	5.62	5.97
	3⅛	3.125	2.9626	2.8183	2.8544	1	32	6.16	6.52
[a] 3¼		3.250	3.0876	2.9433	2.9794	1	29	6.72	7.10
	3⅜	3.375	3.2126	3.0683	3.1044	1	25	7.31	7.70
[a] 3½		3.500	3.3376	3.1933	3.2294	1	22	7.92	8.33
	3⅝	3.625	3.4626	3.3183	3.3544	1	19	8.55	9.00
[a] 3¾		3.750	3.5876	3.4433	3.4794	1	16	9.21	9.66
	3⅞	3.875	3.7126	3.5683	3.6044	1	14	9.90	10.36
[a] 4		4.000	3.8376	3.6933	3.7294	1	11	10.61	11.08
	4⅛	4.125	3.9626	3.8183	3.8544	1	9	11.34	11.83
4¼		4.250	4.0876	3.9433	3.9794	1	7	12.10	12.61
	4⅜	4.375	4.2126	4.0683	4.1044	1	5	12.88	13.41
4½		4.500	4.3376	4.1933	4.2294	1	3	13.69	14.23
	4⅝	4.625	4.4626	4.3183	4.3544	1	1	14.52	15.1
4¾		4.750	4.5876	4.4433	4.4794	1	0	15.4	15.9
	4⅞	4.875	4.7126	4.5683	4.6044	0	58	16.3	16.8
5		5.000	4.8376	4.6933	4.7294	0	57	17.2	17.8
	5⅛	5.125	4.9626	4.8183	4.8544	0	55	18.1	18.7
5¼		5.250	5.0876	4.9433	4.9794	0	54	19.1	19.7
	5⅜	5.375	5.2126	5.0683	5.1044	0	52	20.0	20.7
5½		5.500	5.3376	5.1933	5.2294	0	51	21.0	21.7
	5⅝	5.625	5.4626	5.3183	5.3544	0	50	22.1	22.7
5¾		5.750	5.5876	5.4433	5.4794	0	49	23.1	23.8
	5⅞	5.875	5.7126	5.5683	5.6044	0	48	24.2	24.9
6		6.000	5.8376	5.6933	5.7294	0	47	25.3	26.0

[a] These are standard sizes of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

Table III.8b.—*6-thread series, basic dimensions,* 6UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
[a] 1⅜		1.375	1.2667	1.1705	1.1946	2	24	1.054	1.155
	1⁷⁄₁₆	1.4375	1.3292	1.2330	1.2571	2	17	1.171	1.277
[a] 1½		1.500	1.3917	1.2955	1.3196	2	11	1.294	1.405
	1⁹⁄₁₆	1.5625	1.4542	1.3580	1.3821	2	5	1.423	1.54
1⅝		1.625	1.5167	1.4205	1.4446	2	0	1.56	1.68
	1¹¹⁄₁₆	1.6875	1.5792	1.4830	1.5071	1	55	1.70	1.83
1¾		1.750	1.6417	1.5455	1.5696	1	51	1.85	1.98
	1¹³⁄₁₆	1.8125	1.7042	1.6080	1.6321	1	47	2.00	2.14
1⅞		1.875	1.7667	1.6705	1.6946	1	43	2.16	2.30
	1¹⁵⁄₁₆	1.9375	1.8292	1.7330	1.7571	1	40	2.33	2.47
2		2.000	1.8917	1.7955	1.8196	1	36	2.50	2.65
	2⅛	2.125	2.0167	1.9205	1.9446	1	30	2.86	3.03
2¼		2.250	2.1417	2.0455	2.0696	1	25	3.25	3.42
	2⅜	2.375	2.2667	2.1705	2.1946	1	20	3.66	3.85
2½		2.500	2.3917	2.2955	2.3196	1	16	4.10	4.29
	2⅝	2.625	2.5167	2.4205	2.4446	1	12	4.56	4.76
2¾		2.750	2.6417	2.5455	2.5696	1	9	5.04	5.26
	2⅞	2.875	2.7667	2.6705	2.6946	1	6	5.55	5.78
3		3.000	2.8917	2.7955	2.8196	1	3	6.09	6.33
	3⅛	3.125	3.0167	2.9205	2.9446	1	0	6.64	6.89
3¼		3.250	3.1417	3.0455	3.0696	0	58	7.23	7.49
	3⅜	3.375	3.2667	3.1705	3.1946	0	56	7.84	8.11
3½		3.500	3.3917	3.2955	3.3196	0	54	8.47	8.75
	3⅝	3.625	3.5167	3.4205	3.4446	0	52	9.12	9.42
3¾		3.750	3.6417	3.5455	3.5696	0	50	9.81	10.11
	3⅞	3.875	3.7667	3.6705	3.6946	0	48	10.51	10.83
4		4.000	3.8917	3.7955	3.8196	0	47	11.24	11.57
	4⅛	4.125	4.0167	3.9205	3.9446	0	45	12.00	12.33
4¼		4.250	4.1417	4.0455	4.0696	0	44	12.78	13.12
	4⅜	4.375	4.2667	4.1705	4.1946	0	43	13.58	13.94
4½		4.500	4.3917	4.2955	4.3196	0	42	14.41	14.78
	4⅝	4.625	4.5167	4.4205	4.4446	0	40	15.3	15.6
4¾		4.750	4.6417	4.5455	4.5696	0	39	16.1	16.5
	4⅞	4.875	4.7667	4.6705	4.6946	0	38	17.0	17.5
5		5.000	4.8917	4.7955	4.8196	0	37	18.0	18.4
	5⅛	5.125	5.0167	4.9205	4.9446	0	36	18.9	19.3
5¼		5.250	5.1417	5.0455	5.0696	0	35	19.9	20.3
	5⅜	5.375	5.2667	5.1705	5.1946	0	35	20.9	21.3
5½		5.500	5.3917	5.2955	5.3196	0	34	21.9	22.4
	5⅝	5.625	5.5167	5.4205	5.4446	0	33	23.0	23.4
5¾		5.750	5.6417	5.5455	5.5696	0	32	24.0	24.5
	5⅞	5.875	5.7667	5.6705	5.6946	0	32	25.1	25.6
6		6.000	5.8917	5.7955	5.8196	0	31	26.3	26.8

[a] These are standard sizes of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8c.—*20-thread series, basic dimensions, 20UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [e]
Primary	Secondary								
1	2	3	4	5	6 [e]	7		8	9
in.	in.	in.	in.	in.	in.	deg	min	in.²	in.²
a 1/4		.250	0.2175	0.1887	0.1959	4	11	0.0269	0.0318
5/16		.3125	.2800	.2512	.2584	3	15	.0481	.0547
3/8		.375	.3425	.3137	.3209	2	40	.0755	.0836
a 7/16		.4375	.4050	.3762	.3834	2	15	.1090	.1187
a 1/2		.500	.4675	.4387	.4459	1	57	.1486	.160
9/16		.5625	.5300	.5012	.5084	1	43	.194	.207
5/8		.625	.5925	.5637	.5709	1	32	.246	.261
	1 1/16	.6875	.6550	.6262	.6334	1	24	.304	.320
a 3/4		.750	.7175	.6887	.6959	1	16	.369	.386
	a 13/16	.8125	.7800	.7512	.7584	1	10	.439	.458
a 7/8		.875	.8425	.8137	.8209	1	5	.515	.536
	a 15/16	.9375	.9050	.8762	.8834	1	0	.598	.620
a 1		1.000	.9675	.9387	.9459	0	57	.687	.711
	1 1/16	1.0625	1.0300	1.0012	1.0084	0	53	.782	.807
1 1/8		1.125	1.0925	1.0637	1.0709	0	50	.882	.910
	1 3/16	1.1875	1.1550	1.1262	1.1334	0	47	.990	1.018
1 1/4		1.250	1.2175	1.1887	1.1959	0	45	1.103	1.133
	1 5/16	1.3125	1.2800	1.2512	1.2584	0	43	1.222	1.254
1 3/8		1.375	1.3425	1.3137	1.3209	0	41	1.348	1.382
	1 7/16	1.4375	1.4050	1.3762	1.3834	0	39	1.479	1.51
1 1/2		1.500	1.4675	1.4387	1.4459	0	37	1.62	1.65
	1 9/16	1.5625	1.5300	1.5012	1.5084	0	36	1.76	1.80
1 5/8		1.625	1.5925	1.5637	1.5709	0	34	1.91	1.95
	1 11/16	1.6875	1.6550	1.6262	1.6334	0	33	2.07	2.11
1 3/4		1.750	1.7175	1.6887	1.6959	0	32	2.23	2.27
	1 13/16	1.8125	1.7800	1.7512	1.7584	0	31	2.40	2.44
1 7/8		1.875	1.8425	1.8137	1.8209	0	30	2.57	2.62
	1 15/16	1.9375	1.9050	1.8762	1.8834	0	29	2.75	2.80
2		2.000	1.9675	1.9387	1.9459	0	28	2.94	2.99
	2 1/8	2.125	2.0925	2.0637	2.0709	0	26	3.33	3.39
2 1/4		2.250	2.2175	2.1887	2.1959	0	25	3.75	3.81
	2 3/8	2.375	2.3425	2.3137	2.3209	0	23	4.19	4.25
2 1/2		2.500	2.4675	2.4387	2.4459	0	22	4.66	4.72
	2 5/8	2.625	2.5925	2.5637	2.5709	0	21	5.15	5.21
2 3/4		2.750	2.7175	2.6887	2.6959	0	20	5.66	5.73
	2 7/8	2.875	2.8425	2.8137	2.8209	0	19	6.20	6.27
3		3.000	2.9675	2.9387	2.9459	0	18	6.77	6.84

a These are standard sizes of the UNC, UNF, or UNEF series.
b Design form. See fig. III.1, p. 2 in this Supplement.
e See formula under definition of tensile stress area on p. 102 in this Supplement.

Table III.8d.—*28-thread series, basic dimensions, 28UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	No. in.	in.	in.	in.	in.	deg	min	in.²	in.²
	a12	.216	0.1928	0.1722	0.1773	3	22	0.0226	0.0258
a ¼		.250	.2268	.2062	.2113	2	52	.0326	.0364
5⁄16		.3125	.2893	.2687	.2738	2	15	.0556	.0606
3⁄8		.375	.3518	.3312	.3363	1	51	.0848	.0909
a 7⁄16		.4375	.4143	.3937	.3988	1	34	.1201	.1274
a ½		.500	.4768	.4562	.4613	1	22	.162	.170
9⁄16		.5625	.5393	.5187	.5238	1	12	.209	.219
5⁄8		.625	.6018	.5812	.5863	1	5	.263	.274
	11⁄16	.6875	.6643	.6437	.6488	0	59	.323	.335
¾		.750	.7268	.7062	.7113	0	54	.389	.402
	13⁄16	.8125	.7893	.7687	.7738	0	50	.461	.475
7⁄8		.875	.8518	.8312	.8363	0	46	.539	.554
	15⁄16	.9375	.9143	.8937	.8988	0	43	.624	.640
1		1.000	.9768	.9562	.9613	0	40	.714	.732
	1 1⁄16	1.0625	1.0393	1.0187	1.0238	0	38	.811	.830
1⅛		1.125	1.1018	1.0812	1.0863	0	35	.914	.933
	1 3⁄16	1.1875	1.1643	1.1437	1.1488	0	34	1.023	1.044
1¼		1.250	1.2268	1.2062	1.2113	0	32	1.138	1.160
	1 5⁄16	1.3125	1.2893	1.2687	1.2738	0	30	1.259	1.282
1⅜		1.375	1.3518	1.3312	1.3363	0	29	1.386	1.411
	1 7⁄16	1.4375	1.4143	1.3937	1.3988	0	28	1.52	1.55
1½		1.500	1.4768	1.4562	1.4613	0	26	1.66	1.69

a These are standard sizes of the UNF or UNEF series.
b Design form. See fig. III.1, p. 2 in this Supplement.
c See formula under definition of tensile stress area on p. 102 in this Supplement.

Table III.8e.—*32-thread series, basic dimensions, 32UN*

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\dfrac{E}{2}-\dfrac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
No. in.	No. in.	in.	in.	in.	in.	deg	min	in.²	in.²
a 6		.138	0.1177	0.0997	0.1042	4	50	0.00745	0.00909
a 8		.164	.1437	.1257	.1302	3	58	.01196	.0140
a 10		.190	.1697	.1517	.1562	3	21	.01750	.0200
	a 12	.216	.1957	.1777	.1822	2	55	.0242	.0270
a ¼		.250	.2297	.2117	.2162	2	29	.0344	.0379
a 5⁄16		.3125	.2922	.2742	.2787	1	57	.0581	.0625
a 3⁄8		.375	.3547	.3367	.3412	1	36	.0878	.0932
7⁄16		.4375	.4172	.3992	.4037	1	22	.1237	.1301
½		.500	.4797	.4617	.4662	1	11	.166	.173
9⁄16		.5625	.5422	.5242	.5287	1	3	.214	.222
5⁄8		.625	.6047	.5867	.5912	0	57	.268	.278
	11⁄16	.6875	.6672	.6492	.6537	0	51	.329	.339
¾		.750	.7297	.7117	.7162	0	47	.395	.407
	13⁄16	.8125	.7922	.7742	.7787	0	43	.468	.480
7⁄8		.875	.8547	.8367	.8412	0	40	.547	.560
	15⁄16	.9375	.9172	.8992	.9037	0	37	.632	.646
1		1.000	.9797	.9617	.9662	0	35	.723	.738

a These are standard sizes of the UNC, UNF, or UNEF series.
b Design form. See fig. III.1, p. 2 in this Supplement.
c See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.9.—*Increments in pitch diameter tolerance formula* [a]

$$[\text{PD tolerance}=C(0.0015\sqrt[3]{D}+0.0015\sqrt{L_e}+0.015\sqrt[3]{p^2})]$$

Diameter increments				Length of engagement increments																	
				Based on [b]					Based on [b]					Based on [b]			
D	$0.0015\sqrt[3]{D}$	D	$0.0015\sqrt[3]{D}$	$1D$ for sizes	$9p$ for tpi	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$	$1D$ for sizes	$9p$ for tpi	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$	$1D$ for sizes	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$
1	2	1	2	3	4	5	6	7	3	4	5	6	7	3	5	6	7
in.	*in.*	*in.*	*in.*	No. *in.*			*in.*	*in.*	*in.*			*in.*	*in.*	*in.*		*in.*	*in.*
0.0600	0.000587	1.9375	0.001870	0	------	------	0.0600	0.000367	½	18	40	0.5000	0.001061	2⅜	------	2.3750	0.002312
.0625	.000595	2.0000	.001890	1⁄16	------	------	.0625	.000375			36	.5556	.001118	2½	8	2.5000	.002372
.0730	.000627	2.1250	.001928	1	------	------	.0730	.000405	9⁄16	16		.5625	.001125	2⅝	------	2.6250	.002430
.0860	.000662	2.2500	.001966	5⁄64	------	------	.0781	.000419	⅝		32	.6250	.001186	2¾	------	2.7500	.002487
.0938	.000682	2.3750	.002001	2	------	------	.0860	.000440		14		.6429	.001203	------	7	2.8571	.002535
.0990	.000694	2.5000	.002036	3⁄32	------	------	.0938	.000459	11⁄16			.6875	.001244	2⅞	------	2.8750	.002543
.1120	.000723	2.6250	.002069	3	------	------	.0990	.000472		13		.6923	.001248	3	------	3.0000	.002598
.1250	.000750	2.7500	.002102	7⁄64	------	------	.1094	.000496			28	.7143	.001268	3⅛	------	3.1250	.002652
.1380	.000775	2.8750	.002133	4	------	------	.1120	.000502			27	.7407	.001291	3¼	------	3.2500	.002704
.1640	.000821	3.0000	.002163	------	80	------	.1125	.000503	¾	12		.7500	.001299	------	6	3.3333	.002739
.1875	.000859	3.1250	.002193	5	72	------	.1250	.000530		11½		.7826	.001327	3⅜	------	3.3750	.002756
.1900	.000862	3.2500	.002222	6	------	------	.1380	.000557	13⁄16			.8125	.001352	3½	------	3.5000	.002806
.2160	.000900	3.3750	.002250	------	64	------	.1406	.000562		11		.8182	.001357	3⅝	------	3.6250	.002856
.2500	.000945	3.5000	.002277	5⁄32	------	------	.1562	.000593			24	.8333	.001369	3¾	------	3.7500	.002905
.3125	.001018	3.6250	.002304	------	56	------	.1607	.000601	⅞			.8750	.001403	3⅞	------	3.8750	.002953
.3750	.001082	3.7500	.002330	8	------	------	.1640	.000607		10		.9000	.001423	4	5	4.0000	.003000
.4375	.001139	3.8750	.002356	11⁄64	------	------	.1719	.000622	15⁄16			.9375	.001452	4⅛	------	4.1250	.003047
.5000	.001191	4.0000	.002381	3⁄16	48	------	.1875	.000650		9	20	1.0000	.001500	4¼	------	4.2500	.003092
.5625	.001238	4.1250	.002406	10	------	------	.1900	.000654	1 1⁄16			1.0625	.001546	4⅜	------	4.3750	.003137
.6250	.001282	4.2500	.002430	13⁄64	------	------	.2031	.000676			18	1.1111	.001581	------	4½	4.4444	.003162
.6875	.001324	4.3750	.002453	------	44	------	.2045	.000678	1⅛	8		1.1250	.001591	4½	------	4.5000	.003182
.7500	.001363	4.5000	.002476	12	------	------	.2160	.000697	1 3⁄16			1.1875	.001635	4⅝	------	4.6250	.003226
.8125	.001400	4.6250	.002499	7⁄32	------	------	.2188	.000702	1¼		16	1.2500	.001677	4¾	------	4.7500	.003269
.8750	.001435	4.7500	.002521	------	40	------	.2250	.000712		7		1.2857	.001701	4⅞	------	4.8750	.003312
.9375	.001468	4.8750	.002543	15⁄64	------	------	.2344	.000726	1 5⁄16			1.3125	.001718	5	4	5.0000	.003354
1.0000	.001500	5.0000	.002565	¼	36	80	.2500	.000750	1⅜			1.3750	.001759	5⅛	------	5.1250	.003396
1.0625	.001531	5.1250	.002586	17⁄64	------	------	.2656	.000773			14	1.4286	.001793	5¼	------	5.2500	.003437
1.1250	.001560	5.2500	.002607	------	------	72	.2778	.000791	1 7⁄16			1.4375	.001798	5⅜	------	5.3750	.003478
1.1875	.001588	5.3750	.002628	------	32	------	.2812	.000795	1½	6		1.5000	.001837	5½	------	5.5000	.003518
1.2500	.001616	5.5000	.002648	19⁄64	------	------	.2969	.000817			13	1.5385	.001861	5⅝	------	5.6250	.003558
1.3125	.001642	5.6250	.002668	5⁄16	------	64	.3125	.000839	1 9⁄16			1.5625	.001875	5¾	------	5.7500	.003597
1.3750	.001668	5.7500	.002687	------	28	------	.3214	.000850	1⅝			1.6250	.001912	5⅞	------	5.8750	.003636
1.4375	.001693	5.8750	.002707	21⁄64	------	------	.3281	.000859			12	1.6667	.001936	6	------	6.0000	.003674
1.5000	.001717	6.0000	.002726	------	27	60	.3333	.000866	1 11⁄16			1.6875	.001949	6½	------	6.5000	.003824
1.5625	.001741	7.0000	.002869	11⁄32	------	------	.3438	.000880			11½	1.7391	.001978	7	------	7.0000	.003969
1.6250	.001764	8.0000	.003000	------	------	56	.3571	.000896	1¾			1.7500	.001984	7½	------	7.5000	.004108
1.6875	.001786	9.0000	.003120	23⁄64	------	------	.3594	.000899		5		1.8000	.002012	8	------	8.0000	.004243
1.7500	.001808	10.0000	.003232	⅜	24	------	.3750	.000919	1 13⁄16			1.8125	.002019	8½	------	8.5000	.004373
1.8125	.001829	12.0000	.003434	25⁄64	------	------	.3906	.000937			11	1.8182	.002023	9	------	9.0000	.004500
1.8750	.001850	14.0000	.003615	13⁄32	------	------	.4062	.000956	1⅞			1.8750	.002054	9½	------	9.5000	.004623
		16.0000	.003780	------	------	48	.4167	.000968	1 15⁄16			1.9375	.002088	10	------	10.0000	.004743
		18.0000	.003931	27⁄64	------	------	.4219	.000974	2	4½	10	2.0000	.002121	10½	------	10.5000	.004861
		20.0000	.004072	7⁄16	------	------	.4375	.000992	2⅛			2.1250	.002187	11	------	11.0000	.004975
		24.0000	.004327	------	20	------	.4500	.001006			9	2.2222	.002236	11½	------	11.5000	.005087
				------	------	44	.4545	.001011	2¼	4		2.2500	.002250	12	------	12.0000	.005196

Pitch increments

Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$
	in.		*in.*		*in.*		*in.*		*in.*		*in.*		*in.*
80	0.000808	50	0.001105	36	0.001376	27	0.001667	18	0.002184	11½	0.002944	7	0.004099
72	.000867	48	.001136	34	.001429	26	.001709	16	.002362	11	.003033	6	.004543
64	.000938	44	.001204	32	.001488	24	.001803	14	.002582	10	.003232	5½	.004814
60	.000979	42	.001241	30	.001554	22	.001910	13	.002713	9	.003467	5	.005130
56	.001025	40	.001282	28	.001627	20	.002036	12	.002862	8	.003750	4½	.005503
------	------	------	------	------	------	------	------	------	------	------	------	4	.005953

[a] For class 2A, $C=1$. For other classes, values of C are given in the text, pp. 21 and 22, Part I.
[b] For example: $L_e=0.5000$ is equivalent to one diameter for the ½-in. size, 9 pitches for 18 threads per inch, and 20 pitches for 40 threads per inch.

p. 22, (b) *Length of engagement:* Revise to read:

"(b) *Length of engagement.*—The pitch diameter tolerances specified in table III.10 in this Supplement for the UNC, UNF, 4UN, 6UN, and 8UN series are based on a length of engagement equal to the basic major (nominal) diameter and are applicable for lengths of engagement up to 1½ diameters.

Where the length of engagement exceeds that for which these tolerances are applicable, the pitch diameter tolerances should be computed from the formula (table III.10) values for the standard lengths of engagement of one diameter, as follows: for lengths of engagement over 1½ to 3 diameters, the pitch diameter tolerances are 125 percent of the formula values; and for lengths of engagement over 3 diameters, the tolerances are 150 percent of the formula values.

The pitch diameter tolerances specified in table III.10 in this Supplement for the UNEF, 12UN, 16UN, 20UN, 28UN, and 32UN series are based on a length of engagement of 9 pitches and are applicable for lengths of engagement up to 15 pitches.

Where the length of engagement exceeds that for which these tolerances are applicable, the pitch diameter tolerances should be computed from the formula (table III.10) values for the standard lengths of engagement of 9 pitches, as follows: for lengths of engagement over 15 to 30 pitches, the pitch diameter tolerances are 125 percent of the formula values; and for lengths of engagement over 30 pitches, the tolerances are 150 percent of the formula values."

p.22, (c) *Limits of size:* Revise to read:

"(c) *Limits of size.*[5a]—With respect to the pitch diameter limits of size, it is intended, except as hereinafter qualified, that no portion of the complete thread be permitted to project beyond the envelope defined by the maximum-material limits on the one hand, or beyond that defined by the minimum-material limits on the other, and thus be outside of the tolerance zone as illustrated in figures III.3 and III.4, Part I.[5b]

"Diameter equivalents of variations in lead, uniformity of helix, and flank angles are in the direction toward maximum material. Also included in pitch-diameter limits are other variations from size and profile, such as taper, out-of-round, and surface defects. Thus the maximum-material pitch diameter limits are a limitation of the virtual diameter (effective size) *and are so specified herein for all thread classes.* It is intended that diameter equivalents of deviations in any given element except pitch diameter should not exceed one-half of the pitch-diameter tolerance. Values are given in table III.11, p. 33 in this Supplement, for deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances. Flank angle equivalents should be based on a depth of thread engagement of $5H/8$.

"Variations in taper and roundness of the pitch diameter, together with variations of the pitch diameter as a whole, may be in the direction of minimum material and thus the minimum-material pitch diameter limit may be specified as a limitation of the pitch diameter as a single element. However, in view of the interrelation of the pitch diameter, variations in lead and flank angle, etc., together with practical considerations relating to established production processes, product application and inspection procedures, except for class 3A it is customary to base acceptance at the minimum-material condition (minimum pitch diameter of the external thread and maximum pitch diameter of the internal thread) on threaded plug and ring gaging, with gages to the thread form and length specified in Section VI, Part I, for fasteners and some custom threaded parts where design requirements are fulfilled. See 'Dimensional acceptability of threads,' p. 99 in this Supplement."

pp. 23 and 26, 4. COATED THREADS: Revise to read:

"4. COATED THREADS.—It is not within the scope of this standard to make recommendations for thickness of, or to specify limits for, coatings. However, it will aid mechanical interchangeability if certain principles are followed whenever conditions permit.

"It is desirable that the finished threads be within the limits of size established herein. To that end, external threads should not exceed the basic size after coating and internal threads should not be below the basic size after coating. However, it is recognized that there are some commonly used processes, such as hot-dip galvanizing, which are firmly established, and threads coated by such processes do not fall within the scope of this recommendation.

"(a) *Guide for relieving external threads.*—Class 2A provides both a tolerance and an allowance. Many requirements are such as those for coatings deposited by electroplating processes. In general the 2A allowance provides adequate relief for coatings up to a minimum thickness [5c] of one-sixth of the 2A allowance, inasmuch as there are variables in thickness of coating and symmetry of coating resulting from commercial processes. See paragraph 2 (bottom col. 1, p. 23, Part I). It should be stressed that threads after coating should be accepted by a basic size GO thread ring gage or equivalent functional gage.

"Class 1A provides an allowance, but in this case the allowance is maintained for both coated and uncoated product. Special provisions before

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[5c] The maximum allowance at the maximum material condition of six times the minimum coating thickness is derived from dividing the deposit on the flank of the thread by the sine of the 30 degree half angle and multiplying the result by two for the diameter equivalent, then adding 50 percent for the plater's tolerance. The minimum allowance at the minimum material condition of four times the minimum coating thickness is two-thirds of the maximum allowance, inasmuch as the thickness of coating will bring the limits of size within standard limits with the additional allowance for the plater's tolerance omitted.

coating are necessary where (1) the design requires that the class 2A allowance be available after coating, or (2) the design requires that an allowance be provided for class 3A threads, or (3) the thickness of coating is too great to be accomodated by the class 2A allowance. In these cases it is recommended that the limits of size before coating be reduced by the amount of the 2A allowance whenever that allowance is adequate, or that the maximum limits of the major and pitch diameters be decreased by an amount equal to six times the minimum coating thickness and the minimum limits be decreased by an amount equal to four times the minimum coating thickness.

"(b) *Internal threads.*—No provision is made for relieving internal threads as coatings on such threads are not generally required. Further, it is very difficult to deposit a significant thickness of coating on the flanks of internal threads. However, where a specific thickness of coating is required in an internal thread, it is suggested that the thread be relieved so that the thread after coating will be accepted by a GO thread plug gage of basic size. It is recommended that (1) the limits of size before coating be increased by the amount of the 2A allowance whenever that allowance is adequate, or (2) the minimum limits of the minor and pitch diameters be increased by an amount equal to six times the minimum coating thickness and the maximum limits be increased by an amount equal to four times the minimum coating thickness."

p. 26, Subsection 5. METHOD OF DESIGNATING A SCREW THREAD: Revise to read as follows:

"5. METHOD OF DESIGNATING A SCREW THREAD

"1. Basic Method of Designating.—The basic method of designating a screw thread is used where the standard tolerances or limits of size based on the standard length of engagement are applicable as indicated in par. (b) Length of engagement, p. 16 in this Supplement. The designation specifies in sequence the nominal size, number of threads per inch, thread series symbol, and thread class symbol. *The nominal size* is the basic major diameter and is specified as the fractional diameter, screw number, or their decimal equivalent. Where decimal equivalents are used for size call-out they shall be shown in four place decimals, omitting the cipher in the fourth place, for fractional sizes and three place decimals for numbered sizes. They shall be interpreted as being nominal size designations only and shall have no dimensional significance beyond the fractional size or number designation.

The thread series symbol is UNC, UNF, UNEF, or UN for any of the series shown in table III.2 in this Supplement and UNS for any other diameter-pitch combination having tolerances to Unified formulation.

The thread class symbol is 1A, 1B, 2A, 2AG, 2B, 3A, or 3B where the suffixes A and B relate to external and internal threads respectively. Suffix G in the 2AG symbol indicates that the 2A dimensions are to be met after coating. See designation on p. 18 of this Supplement.

Examples:

—*Nominal size (fractional diameter or screw number with decimal equivalent of either being optional)*

—*Number of threads per inch*

—*Thread series symbol (see dimensional tables)*

—*Thread class symbol (see (b) Screw-thread classes, p. 23, Part I)*

¼–20 UNC–2A or .250–20 UNC–2A
10–32 UNF–2A or .190–32 UNF–2A
⁷⁄₁₆–20 UNF–2A or .4375–20 UNF–2A
⁷⁄₁₆–20 UNF–3A or .4375–20 UNF–3A

For uncoated standard series threads (table III.2 in this Supplement) these designations may optionally be supplemented by the addition of the pitch diameter limits of size.

Example:

¼–20 UNC–2A
PD .2164–.2127 (*Optional for uncoated threads*)

Note. PD limits are those in table III.10 in this Supplement for class 2A.

UNS threads and threads having special length of engagement require certain additional information as shown on pp. 19 and 20 in this Supplement.

"(a) *Designations for coated (or plated) threads.*—Specification on drawings of the before and after coating dimensions for screw threads is sometimes dictated by an engineering or production consideration that the size before and after coating be controlled. This results from coated screw threads having two stages of design; the before coating stage and the after coating stage. The threaded product may be produced by a supplier and coated by a user. In this case, it is necessary that a clear understanding of the coating requirements and the allowance for coating buildup be agreed upon by both supplier and user.

The before coating dimensions have a definite bearing on the strength of the screw threads. The after coating dimensions must allow the threads to assemble with their mating threads, as intended.

Recommended methods for designating coated threads under various conditions are described in the following:

For coated (or plated) class 1A external threads the max major and max pitch diameters may optionally be given followed by the words "AFTER COATING", thereby indicating that the thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, coated threads, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

Example: ¼–20 UNC–1A
MAJOR DIA .2489 MAX ⎫
PD .2164 MAX ⎬ AFTER COATING (*Optional*)

Note. Major and PD limits are those in table III.10 in this Supplement for class 1A.

MAJOR DIA .2478–.2356 SPL ⎫
PD .2153–.2097 SPL ⎬ BEFORE COATING

Note. Major and PD limits correspond to those in table III.10 in this Supplement for class 1A minus the allowance.

For coated (or plated) class 2A external threads the basic (max) major and basic (max) pitch diameters shall be given followed by the words "AFTER COATING". The major and pitch diameter limits of size before coating shall also be given followed by the words "BEFORE COATING".

Example: [5d] ¾–10 UNC–2A
MAJOR DIA .7500 MAX ⎫
PD .6850 MAX ⎬ AFTER COATING

Note. Major and PD limits are equal to basic and correspond to those in table III.10 in this Supplement for class 3A.

MAJOR DIA .7482–.7353 ⎫
PD .6832–.6773 ⎬ BEFORE COATING

Note. Major and PD limits are those in table III.10 in this Supplement for class 2A.

Certain applications require an allowance for rapid assembly to permit application of the proper lubricant or for residual growth due to high temperature expansion. In these applications, when the thread is coated and the 2A allowance is not permitted to be consumed by such coating, the thread class symbol is qualified by the addition of the letter G (symbol for allowance) following the class symbol and the max major and max pitch diameters are reduced below basic size by the amount of the 2A allowance and followed by the words "AFTER COATING", thereby ensuring that the allowance is maintained. The thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall also be given followed by the words "BEFORE COATING".

Example: ¾–10 UNC–2AG
MAJOR DIA .7482 MAX ⎫
PD .6832 MAX ⎬ AFTER COATING

Note. Major and PD limits are those in table III.10 in this Supplement for class 2A.

MAJOR DIA .7464–.7335 SPL ⎫
PD .6814–.6755 SPL ⎬ BEFORE COATING

Note. Major and PD limits correspond to those in table III.10 in this Supplement for class 2A minus the allowance.

For coated (or plated) class 3A external threads, the max major and max pitch diameters may optionally be given followed by the words "AFTER COATING", thereby indicating that the thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

[5d] Threads accepted to class 2A limits before coating are accepted after coating by basic size thread gages. The allowance given in the dimensional tables for class 2A threads is sufficient to allow for a limited amount of coating as described in paragraph 4, Coated threads, p. 16 in this Supplement, but if a greater coating thickness is required it will be necessary to calculate the before coating limits in accordance with paragraph 4, p. 16 in this Supplement.

Example: ¼–28 UNF–3A
MAJOR DIA .2500 MAX
PD .2268 MAX } AFTER COATING (*Optional*)

Note. Major and PD limits are those in table III.10 in this Supplement for class 3A.
MAJOR DIA .2488–.2427 SPL
PD .2256–.2235 SPL } BEFORE COATING

For coated (or plated) class 1B, 2B, or 3B internal threads the min minor diameter and min pitch diameter may optionally be given followed by the words "AFTER COATING". The minor and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

Examples: [5e] ¼–20 UNC–1B
MINOR DIA .196 MIN
PD .2175 MIN } AFTER COATING (*Optional*)
MINOR DIA .197–.208 SPL
PD .2186–.2259 SPL } BEFORE COATING

¾–10 UNC–2B
MINOR DIA .642 MIN
PD .6850 MIN } AFTER COATING (*Optional*)
MINOR DIA .644–.665 SPL
PD .6868–.6945 SPL } BEFORE COATING

¼–28 UNF–3B
MINOR DIA .2110 MIN
PD .2268 MIN } AFTER COATING (*Optional*)
MINOR DIA .2122–.2198 SPL
PD .2280–.2308 SPL } BEFORE COATING

"(*b*) *Method of designating left hand threads.*— Unless otherwise specified, threads are right-hand; a left-hand thread shall be designated LH as follows:

¼–20 UNC–3A–LH

"(*c*) *Method of designating UNS threads (Unified tolerance formulations).*—UNS threads have the basic form of designation set out above, supplemented always by the limits of size.
Examples: ¼-24 UNS–3A
MAJOR DIA .2500–.2428
PD .2229–.2201

.495–20 UNS–3A
MAJOR DIA .4950–.4869
PD .4625–.4593

1.200–10 UNS–2B
MINOR DIA 1.092–1.113
PD 1.1350–1.1432

"(*d*) *Method of designating threads having special length of engagement.* Where a standard series thread has a special length of engagement differing from that for which the standard pitch diameter tolerances are applicable, as indicated in paragraph (b), Length of engagement, p. 16 in this Supplement, the thread class symbol is qualified by the addition of the letters SE (special engagement) preceding the class symbol. The specification of the special pitch diameter limits of size and the length of engagement (LE) rounded to a two-place decimal are a requirement.
Examples: ½–13 UNC–SE2A
PD .4485–.4431
LE 1.00

¼–24 UNS–SE3A
MAJOR DIA .2500–.2428
PD .2229–.2198
LE .88

"(*e*) *Method of designating threads having modified crests.*—It is occasionally necessary to modify the limits of size of the major diameter of an external thread or the minor diameter of an internal thread within the maximum material limits established for standard series and special threads in order to fit a specific purpose but without change in class of thread or pitch diameter limits. (It should be noted that standard pitch diameter gages may be used to accept such threads). Such threads shall be specified with the established thread designation followed by a statement of the modified diameter limits and the designation 'MOD'.

[5e] The after coating limits for all of the examples given are the minor and PD limits in table III.10 in this Supplement for the respective class of thread. The before coating limits for all of the examples above are calculated using the 2A allowance where it is suitable for a minimum coating (or plating) thickness of 0.0002 in. on the thread flanks.

Examples: ⅜–24 UNF–3A MOD
MAJOR DIA .3720–.3648 MOD

1½–10 UNS–3B MOD
MINOR DIA 1.398–1.409 MOD
PD 1.4350–1.4412

2. DESIGNATIONS FOR ACCEPTANCE OF THREADS
BY OTHER THAN GENERAL PRACTICE.—Threads
to be accepted by gaging practices deviating from
those outlined in Part I, Section VI, p. 118, require
additional notes in the thread designation. The
recommended methods of designating these threads
are described in the following:

(a) *Method of designating class 3A for LO func-
tional (virtual) diameters.*—Where it is desired to
gage the minimum pitch diameter limits of class
3A external threads as functional (virtual) diame-
ter, instead of as specified in Section VI, the words
"LO FUNCTIONAL DIAMETER" following the
pitch diameter limits should be included in addi-
tion to the information normally given, as follows:

⅜–24 UNF–3A
PD .3468–.3430
LO FUNCTIONAL DIAMETER

(b) *Method of designating class 2A for LO pitch
diameters.*—Where it is desired to gage the mini-
mum pitch diameter limits of class 2A external
threads as a single element instead of as specified
in Section VI, the words "LO PITCH DIAME-
TER" following the pitch diameter limits should
be included in addition to the information normally
given, as follows:

⅜–16 UNC–2A
PD .3331–.3287
LO PITCH DIAMETER

3. DESIGNATIONS OF OTHER THREADS.—Threads
having tolerances that do not conform to Unified
formulation, and threads having multiple starts or
special form, also require additional data in the
thread designation. The recommended methods
of designating these threads are described in the
following:

"(a) *Method of designating threads having toler-
ances not to Unified formulation.*—If a standard
series thread is altered in any respect other than
revised pitch diameter limits for a special length
of engagement, the modification of crests or the
adjustment of the limits of size to accommodate
coating, as shown above, it is designated in
accordance with the following examples:

⁷⁄₁₆–24 UNIFIED FORM SPECIAL-EXT[5f]
MAJOR DIA .4340–.4280 SPL
PD .4065–.4025 SPL
LE .38

½–13 UNIFIED FORM SPECIAL-INT[5f]
MINOR DIA .424–.434 SPL
PD .4500–.4580 SPL
LE .50

"(b) *Method of designating multiple-start
threads.*—If a thread is required with a multiple
start, it is designated by specifying in sequence
the nominal size, pitch (in decimals or threads per
inch), and lead (in decimals or fractions) as
follows:

Example:
¾–.0625P–.1875L–UNIFIED FORM SPECIAL-EXT[5f]
MAJOR DIA .7485–.7391
PD .7079–.7003 SPL
LE .75
Optional for first line of above designation:
¾–16–³⁄₁₆L–UNIFIED FORM SPECIAL-EXT or
¾–16–UNIFIED FORM SPECIAL–3 START-EXT

"(c) *Method of designating special form threads.*—
If a thread for design consideration requires a
deviation from Unified standard thread contour
and is not covered by another recognized standard,
such as when the detail of the root differs from
that for the standard thread form, the designation
shall neither include the letters 'UN' nor the
word 'UNIFIED' but shall be as follows:

Example: ⅞–18 SPECIAL FORM-EXT[5f]
THREAD ANGLE 60°
MAJOR DIA .8750–.8668
PD .8384–.8343
MAX MINOR DIA .8068 (as gaged)
LE .69

NOTE. The 'as gaged' diameter describes the
diameter of the GO thread ring gage."

(d) *Designations for long length of engagement.*—
In the assembly of threads in mating parts, the
length of engagement varies according to the
design requirements. It should be noted that the
length of engagement is not necessarily the same
as the full thread length provided on the part, but
is the length of assembled thread in the mating
parts.

In some instances, the length of engagement
may be longer than that which is applicable to the
tolerances for the standard length of engagement
and additional precautions are necessary to assure
proper assembly. In the case of custom parts,
this may be taken into consideration when design-
ing the parts. The proper pitch diameter tolerance
may be obtained from the step tables, Section IV,
or computed from the formulas, and the length of
engagement shall be included in the designation as
specified above.

pp. 27 to 68, tables III.10, III.11, III.12, and
III.13: Revise to read as follows:

(Next text on p. 91.)

[5f] Where the thread designation is used in text or is shown on a drawing,
and a leader line does not indicate the specific position, then add EXT or
INT to the designation.

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TABLE III.10.—*Standard series limits of size—Unified screw threads*

		External [a]									Internal [a]						
Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
0-80 or .060-80	UNF	2A 3A	0.0005 .0000	0.0595 .0600	0.0563 .0568	-------- --------	0.0514 .0519	0.0196 .0506	0.0018 .0013	0.0442 .0447	2B 3B	0.0465 .0465	0.0514 .0514	0.0519 .0519	0.0542 .0536	0.0023 .0017	0.0600 .0600
1-64 or .073-64	UNC	2A 3A	.0006 .0000	.0724 .0730	.0686 .0692	-------- --------	.0623 .0629	.0603 .0614	.0020 .0015	.0532 .0538	2B 3B	.0561 .0561	.0623 .0623	.0629 .0629	.0655 .0648	.0026 .0019	.0730 .0730
1-72 or .073-72	UNF	2A 3A	.0006 .0000	.0724 .0730	.0689 .0695	-------- --------	.0634 .0640	.0615 .0626	.0019 .0014	.0554 .0560	2B 3B	.0580 .0580	.0635 .0635	.0640 .0640	.0665 .0659	.0025 .0019	.0730 .0730
2-56 or .086-56	UNC	2A 3A	.0006 .0000	.0854 .0860	.0813 .0819	-------- --------	.0738 .0744	.0717 .0728	.0021 .0016	.0635 .0641	2B 3B	.0667 .0667	.0737 .0737	.0744 .0744	.0772 .0765	.0028 .0021	.0869 .0860
2-64 or .086-64	UNF	2A 3A	.0006 .0000	.0854 .0860	.0816 .0822	-------- --------	.0753 .0759	.0733 .0744	.0020 .0015	.0662 .0668	2B 3B	.0691 .0691	.0753 .0753	.0759 .0759	.0786 .0779	.0027 .0020	.0860 .0860
3-48 or .099-48	UNC	2A 3A	.0007 .0000	.0983 .0990	.0938 .0945	-------- --------	.0848 .0855	.0825 .0838	.0023 .0017	.0727 .0734	2B 3B	.0764 .0764	.0845 .0815	.0855 .0855	.0885 .0877	.0030 .0022	.0990 .0990
3-56 or .099-56	UNF	2A 3A	.0007 .0000	.0983 .0990	.0942 .0949	-------- --------	.0867 .0874	.0845 .0858	.0022 .0016	.0764 .0771	2B 3B	.0797 .0797	.0865 .0865	.0874 .0874	.0902 .0895	.0028 .0021	.0990 .0990
4-40 or .112-40	UNC	2A 3A	.0008 .0000	.1112 .1120	.1061 .1069	-------- --------	.0950 .0958	.0925 .0939	.0025 .0019	.0805 .0813	2B 3B	.0849 .0849	.0939 .0939	.0958 .0958	.0991 .0982	.0033 .0024	.1120 .1120
4-48 or .112-48	UNF	2A 3A	.0007 .0000	.1113 .1120	.1068 .1075	-------- --------	.0978 .0985	.0954 .0967	.0024 .0018	.0857 .0864	2B 3B	.0894 .0894	.0968 .0968	.0985 .0985	.1016 .1008	.0031 .0023	.1120 .1120
5-40 or .125-40	UNC	2A 3A	.0008 .0000	.1242 .1250	.1191 .1199	-------- --------	.1080 .1088	.1054 .1069	.0026 .0019	.0935 .0943	2B 3B	.0979 .0979	.1062 .1062	.1088 .1088	.1121 .1113	.0033 .0025	.1250 .1250
5-44 or .125-44	UNF	2A 3A	.0007 .0000	.1243 .1250	.1195 .1202	-------- --------	.1095 .1102	.1070 .1083	.0025 .0019	.0964 .0971	2B 3B	.1004 .1004	.1079 .1079	.1102 .1102	.1134 .1126	.0032 .0024	.1250 .1250
6-32 or .138-32	UNC	2A 3A	.0008 .0000	.1372 .1380	.1312 .1320	-------- --------	.1169 .1177	.1141 .1156	.0028 .0021	.0989 .0997	2B 3B	.104 .1040	.114 .1140	.1177 .1177	.1214 .1204	.0037 .0027	.1380 .1380
6-40 or .138-40	UNF	2A 3A	.0008 .0000	.1372 .1380	.1321 .1329	-------- --------	.1210 .1218	.1184 .1198	.0026 .0020	.1065 .1073	2B 3B	.111 .1110	.119 .1186	.1218 .1218	.1252 .1243	.0034 .0025	.1380 .1380
8-32 or .164-32	UNC	2A 3A	.0009 .0000	.1631 .1640	.1571 .1580	-------- --------	.1428 .1437	.1399 .1415	.0029 .0022	.1248 .1257	2B 3B	.130 .1300	.139 .1389	.1437 .1437	.1475 .1465	.0038 .0028	.1640 .1640
8-36 or .164-36	UNF	2A 3A	.0008 .0000	.1632 .1640	.1577 .1585	-------- --------	.1452 .1460	.1424 .1439	.0028 .0021	.1291 .1299	2B 3B	.134 .1340	.142 .1416	.1460 .1460	.1496 .1487	.0036 .0027	.1640 .1640
10-24 or .190-24	UNC	2A 3A	.0010 .0000	.1890 .1900	.1818 .1828	-------- --------	.1619 .1629	.1586 .1604	.0033 .0025	.1379 .1389	2B 3B	.145 .1450	.156 .1555	.1629 .1629	.1672 .1661	.0043 .0032	.1900 .1900
10-32 or .190-32	UNF	2A 3A	.0009 .0000	.1891 .1900	.1831 .1840	-------- --------	.1688 .1697	.1658 .1674	.0030 .0023	.1508 .1517	2B 3B	.156 .1560	.164 .1641	.1697 .1697	.1736 .1726	.0039 .0029	.1900 .1900
12-24 or .216-24	UNC	2A 3A	.0010 .0000	.2150 .2160	.2078 .2088	-------- --------	.1879 .1889	.1845 .1863	.0034 .0026	.1639 .1649	2B 3B	.171 .1710	.181 .1807	.1889 .1889	.1933 .1922	.0044 .0033	.2160 .2160
12-28 or .216-28	UNF	2A 3A	.0010 .0000	.2150 .2160	.2085 .2095	-------- --------	.1918 .1928	.1886 .1904	.0032 .0024	.1712 .1722	2B 3B	.177 .1770	.186 .1857	.1928 .1928	.1970 .1959	.0042 .0031	.2160 .2160
12-32 or .216-32	UNEF	2A 3A	.0009 .0000	.2151 .2160	.2091 .2100	-------- --------	.1948 .1957	.1917 .1933	.0031 .0024	.1768 .1777	2B 3B	.182 .1820	.190 .1895	.1957 .1957	.1998 .1988	.0041 .0031	.2160 .2160
¼-20 or .250-20	UNC	1A 2A 3A	.0011 .0011 .0000	.2489 .2489 .2500	.2367 .2408 .2419	------- .2367 -------	.2164 .2164 .2175	.2108 .2127 .2147	.0056 .0037 .0028	.1876 .1876 .1887	1B 2B 3B	.196 .196 .1960	.207 .207 .2067	.2175 .2175 .2175	.2248 .2224 .2211	.0073 .0049 .0036	.2500 .2500 .2500
¼-28 or .250-28	UNF	1A 2A 3A	.0010 .0010 .0000	.2490 .2490 .2500	.2392 .2425 .2435	------- ------- -------	.2258 .2258 .2268	.2208 .2225 .2243	.0050 .0033 .0025	.2052 .2052 .2062	1B 2B 3B	.211 .211 .2110	.220 .220 .2190	.2268 .2268 .2268	.2333 .2311 .2300	.0065 .0043 .0032	.2500 .2500 .2500
¼-32 or .250-32	UNEF	2A 3A	.0010 .0000	.2490 .2500	.2430 .2440	-------- --------	.2287 .2297	.2255 .2273	.0032 .0024	.2107 .2117	2B 3B	.216 .2160	.224 .2229	.2297 .2297	.2339 .2328	.0042 .0031	.2500 .2500
⁵⁄₁₆-18 or .3125-18	UNC	1A 2A 3A	.0012 .0012 .0000	.3113 .3113 .3125	.2982 .3026 .3038	------- .2982 -------	.2752 .2752 .2764	.2691 .2712 .2734	.0061 .0040 .0030	.2431 .2431 .2443	1B 2B 3B	.252 .252 .2520	.265 .265 .2630	.2764 .2764 .2764	.2843 .2817 .2803	.0079 .0053 .0039	.3125 .3125 .3125
⁵⁄₁₆-20 or .3125-20	UN	2A 3A	.0012 .0000	.3113 .3125	.3032 .3044	-------- --------	.2788 .2800	.2748 .2770	.0040 .0030	.2500 .2512	2B 3B	.258 .2580	.270 .2680	.2800 .2800	.2852 .2839	.0052 .0039	.3125 .3125
⁵⁄₁₆-24 or .3125-24	UNF	1A 2A 3A	.0011 .0011 .0000	.3114 .3114 .3125	.3006 .3042 .3053	------- ------- -------	.2843 .2843 .2854	.2788 .2806 .2827	.0055 .0037 .0027	.2603 .2603 .2614	1B 2B 3B	.267 .267 .2670	.277 .277 .2754	.2854 .2854 .2854	.2925 .2902 .2890	.0071 .0048 .0036	.3125 .3125 .3125
⁵⁄₁₆-28 or .3125-28	UN	2A 3A	.0010 .0000	.3115 .3125	.3050 .3060	-------- --------	.2883 .2893	.2849 .2867	.0034 .0026	.2677 .2687	2B 3B	.274 .2740	.282 .2807	.2893 .2893	.2937 .2926	.0044 .0033	.3125 .3125

See footnotes at end of table.

Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
5/16–32 or .3125–32	UNEF	2A	.0010	.3115	.3055	--------	.2912	.2880	.0032	.2732	2B	.279	.286	.2922	.2964	.0042	.3125
		3A	.0000	.3125	.3065	--------	.2922	.2898	.0024	.2742	3B	.2790	.2847	.2922	.2953	.0031	.3125
3/8–16 or .375–16	UNC	1A	.0013	.3737	.3595	--------	.3331	.3266	.0065	.2970	1B	.307	.321	.3344	.3429	.0085	.3750
		2A	.0013	.3737	.3643	.3595	.3331	.3287	.0044	.2970	2B	.307	.321	.3344	.3401	.0057	.3750
		3A	.0000	.3750	.3656	--------	.3344	.3311	.0033	.2983	3B	.3070	.3182	.3344	.3387	.0043	.3750
3/8–20 or .375–20	UN	2A	.0012	.3738	.3657	--------	.3413	.3372	.0041	.3125	2B	.321	.332	.3425	.3479	.0054	.3750
		3A	.0000	.3750	.3669	--------	.3425	.3394	.0031	.3137	3B	.3210	.3297	.3425	.3465	.0040	.3750
3/8–24 or .375–24	UNF	1A	.0011	.3739	.3631	--------	.3468	.3411	.0057	.3228	1B	.330	.340	.3479	.3553	.0074	.3750
		2A	.0011	.3739	.3667	--------	.3468	.3430	.0038	.3228	2B	.330	.340	.3479	.3528	.0049	.3750
		3A	.0000	.3750	.3678	--------	.3479	.3450	.0029	.3239	3B	.3300	.3372	.3479	.3516	.0037	.3750
3/8–28 or .375–28	UN	2A	.0011	.3739	.3674	--------	.3507	.3471	.0036	.3301	2B	.336	.345	.3518	.3564	.0046	.3750
		3A	.0000	.3750	.3685	--------	.3518	.3491	.0027	.3312	3B	.3360	.3426	.3518	.3553	.0035	.3750
3/8–32 or .375–32	UNEF	2A	.0010	.3740	.3680	--------	.3537	.3503	.0034	.3357	2B	.341	.349	.3547	.3591	.0044	.3750
		3A	.0000	.3750	.3690	--------	.3547	.3522	.0025	.3367	3B	.3410	.3469	.3547	.3580	.0033	.3750
7/16–14 or .4375–14	UNC	1A	.0014	.4361	.4206	--------	.3897	.3826	.0071	.3485	1B	.360	.376	.3911	.4003	.0092	.4375
		2A	.0014	.4361	.4258	.4206	.3897	.3850	.0047	.3485	2B	.360	.376	.3911	.3972	.0061	.4375
		3A	.0000	.4375	.4272	--------	.3911	.3876	.0035	.3499	3B	.3600	.3717	.3911	.3957	.0046	.4375
7/16–16 or .4375–16	UN	2A	.0014	.4361	.4267	--------	.3955	.3909	.0046	.3594	2B	.370	.384	.3969	.4028	.0059	.4375
		3A	.0000	.4375	.4281	--------	.3969	.3935	.0034	.3608	3B	.3700	.3800	.3969	.4014	.0045	.4375
7/16–20 or .4375–20	UNF	1A	.0013	.4362	.4240	--------	.4037	.3974	.0063	.3749	1B	.383	.395	.4050	.4131	.0081	.4375
		2A	.0013	.4362	.4281	--------	.4037	.3995	.0042	.3749	2B	.383	.395	.4050	.4104	.0054	.4375
		3A	.0000	.4375	.4294	--------	.4050	.4019	.0031	.3762	3B	.3830	.3916	.4050	.4091	.0041	.4375
7/16–28 or .4375–28	UNEF	2A	.0011	.4364	.4299	--------	.4132	.4096	.0036	.3926	2B	.399	.407	.4143	.4189	.0046	.4375
		3A	.0000	.4375	.4310	--------	.4143	.4116	.0027	.3937	3B	.3990	.4051	.4143	.4178	.0035	.4375
7/16–32 or .4375–32	UN	2A	.0010	.4365	.4305	--------	.4162	.4128	.0034	.3982	2B	.404	.411	.4172	.4216	.0044	.4375
		3A	.0000	.4375	.4315	--------	.4172	.4147	.0025	.3992	3B	.4040	.4094	.4172	.4205	.0033	.4375
1/2–13 or .500–13	UNC	1A	.0015	.4985	.4822	--------	.4485	.4411	.0074	.4041	1B	.417	.434	.4500	.4597	.0097	.5000
		2A	.0015	.4985	.4876	.4822	.4485	.4435	.0050	.4041	2B	.417	.434	.4500	.4565	.0065	.5000
		3A	.0000	.5000	.4891	--------	.4500	.4463	.0037	.4056	3B	.4170	.4284	.4500	.4548	.0048	.5000
1/2–16 or .500–16	UN	2A	.0014	.4986	.4892	--------	.4580	.4533	.0047	.4219	2B	.432	.446	.4594	.4655	.0061	.5000
		3A	.0000	.5000	.4906	--------	.4594	.4559	.0035	.4233	3B	.4320	.4419	.4594	.4640	.0046	.5000
1/2–20 or .500–20	UNF	1A	.0013	.4987	.4865	--------	.4662	.4598	.0064	.4374	1B	.446	.457	.4675	.4759	.0084	.5000
		2A	.0013	.4987	.4906	--------	.4662	.4619	.0043	.4374	2B	.446	.457	.4675	.4731	.0056	.5000
		3A	.0000	.5000	.4919	--------	.4675	.4643	.0032	.4387	3B	.4460	.4537	.4675	.4717	.0042	.5000
1/2–28 or .500–28	UNEF	2A	.0011	.4989	.4924	--------	.4757	.4720	.0037	.4551	2B	.461	.470	.4768	.4816	.0048	.5000
		3A	.0000	.5000	.4935	--------	.4768	.4740	.0028	.4562	3B	.4610	.4676	.4768	.4804	.0036	.5000
1/2–32 or .500–32	UN	2A	.0010	.4990	.4930	--------	.4787	.4752	.0035	.4607	2B	.466	.474	.4797	.4842	.0045	.5000
		3A	.0000	.5000	.4940	--------	.4797	.4771	.0026	.4617	3B	.4660	.4719	.4797	.4831	.0034	.5000
9/16–12 or .5625–12	UNC	1A	.0016	.5609	.5437	--------	.5068	.4990	.0078	.4587	1B	.472	.490	.5084	.5186	.0102	.5625
		2A	.0016	.5609	.5495	.5437	.5068	.5016	.0052	.4587	2B	.472	.490	.5084	.5152	.0068	.5625
		3A	.0000	.5625	.5511	--------	.5084	.5045	.0039	.4603	3B	.4720	.4843	.5084	.5135	.0051	.5625
9/16–16 or .5625–16	UN	2A	.0014	.5611	.5517	--------	.5205	.5158	.0047	.4844	2B	.495	.509	.5219	.5280	.0061	.5625
		3A	.0000	.5625	.5531	--------	.5219	.5184	.0035	.4858	3B	.4950	.5040	.5219	.5265	.0046	.5625
9/16–18 or .5625–18	UNF	1A	.0014	.5611	.5480	--------	.5250	.5182	.0068	.4929	1B	.502	.515	.5264	.5353	.0089	.5625
		2A	.0014	.5611	.5524	--------	.5250	.5205	.0045	.4929	2B	.502	.515	.5264	.5323	.0059	.5625
		3A	.0000	.5625	.5538	--------	.5264	.5230	.0034	.4943	3B	.5020	.5106	.5264	.5308	.0044	.5625
9/16–20 or .5625–20	UN	2A	.0013	.5612	.5531	--------	.5287	.5245	.0042	.4999	2B	.508	.520	.5300	.5355	.0055	.5625
		3A	.0000	.5625	.5544	--------	.5300	.5268	.0032	.5012	3B	.5080	.5162	.5300	.5341	.0041	.5625
9/16–24 or .5625–24	UNEF	2A	.0012	.5613	.5541	--------	.5342	.5303	.0039	.5102	2B	.517	.527	.5354	.5405	.0051	.5625
		3A	.0000	.5625	.5553	--------	.5354	.5325	.0029	.5114	3B	.5170	.5244	.5354	.5392	.0038	.5625
9/16–28 or .5625–28	UN	2A	.0011	.5614	.5549	--------	.5382	.5345	.0037	.5176	2B	.524	.532	.5393	.5441	.0048	.5625
		3A	.0000	.5625	.5560	--------	.5393	.5365	.0028	.5187	3B	.5240	.5301	.5393	.5429	.0036	.5625
9/16–32 or .5625–32	UN	2A	.0010	.5615	.5555	--------	.5412	.5377	.0035	.5232	2B	.529	.536	.5422	.5467	.0045	.5625
		3A	.0000	.5625	.5565	--------	.5422	.5396	.0026	.5242	3B	.5290	.5344	.5422	.5456	.0034	.5625
5/8–11 or .625–11	UNC	1A	.0016	.6234	.6052	--------	.5644	.5561	.0083	.5119	1B	.527	.546	.5660	.5767	.0107	.6250
		2A	.0016	.6234	.6113	.6052	.5644	.5589	.0055	.5119	2B	.527	.546	.5660	.5732	.0072	.6250
		3A	.0000	.6250	.6129	--------	.5660	.5619	.0041	.5135	3B	.5270	.5391	.5660	.5714	.0054	.6250
5/8–12 or .625–12	UN	2A	.0016	.6234	.6120	--------	.5693	.5639	.0054	.5212	2B	.535	.553	.5709	.5780	.0071	.6250
		3A	.0000	.6250	.6136	--------	.5709	.5668	.0041	.5228	3B	.5350	.5463	.5709	.5762	.0053	.6250

See footnotes at end of table.

Nominal size and threads per inch	Series designation	External[a]										Internal[a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter[d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max[b]	Min	Min[c]	Max[b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
5⁄8–16 or .625–16	UN	2A	.0014	.6236	.6142	--------	.5830	.5782	.0048	.5469	2B	.557	.571	.5844	.5906	.0062	.6250
		3A	.0000	.6250	.6156	--------	.5844	.5808	.0036	.5483	3B	.5570	.5662	.5844	.5890	.0046	.6250
5⁄8–18 or .625–18	UNF	1A	.0014	.6236	.6105	--------	.5875	.5805	.0070	.5554	1B	.565	.578	.5889	.5980	.0091	.6250
		2A	.0014	.6236	.6149	--------	.5875	.5828	.0047	.5554	2B	.565	.578	.5889	.5949	.0060	.6250
		3A	.0000	.6250	.6163	--------	.5889	.5854	.0035	.5568	3B	.5650	.5730	.5889	.5934	.0045	.6250
5⁄8–20 or .625–20	UN	2A	.0013	.6237	.6156	--------	.5912	.5869	.0043	.5624	2B	.571	.582	.5925	.5981	.0056	.6250
		3A	.0000	.6250	.6169	--------	.5925	.5893	.0032	.5637	3B	.5710	.5787	.5925	.5967	.0042	.6250
5⁄8–24 or .625–24	UNEF	2A	.0012	.6238	.6166	--------	.5967	.5927	.0040	.5727	2B	.580	.590	.5979	.6031	.0052	.6250
		3A	.0000	.6250	.6178	--------	.5979	.5949	.0030	.5739	3B	.5800	.5869	.5979	.6018	.0039	.6250
5⁄8–28 or .625–28	UN	2A	.0011	.6239	.6174	--------	.6007	.5969	.0038	.5801	2B	.586	.595	.6018	.6067	.0049	.6250
		3A	.0000	.6250	.6185	--------	.6018	.5990	.0028	.5812	3B	.5860	.5926	.6018	.6055	.0037	.6250
5⁄8–32 or .625–32	UN	2A	.0011	.6239	.6179	--------	.6036	.6000	.0036	.5856	2B	.591	.599	.6047	.6093	.0046	.6250
		3A	.0000	.6250	.6190	--------	.6047	.6020	.0027	.5867	3B	.5910	.5969	.6047	.6082	.0035	.6250
11⁄16–12 or .6875–12	UN	2A	.0016	.6859	.6745	--------	.6318	.6264	.0054	.5837	2B	.597	.615	.6334	.6405	.0071	.6875
		3A	.0000	.6875	.6761	--------	.6334	.6293	.0041	.5853	3B	.5970	.6085	.6334	.6387	.0053	.6875
11⁄16–16 or .6875–16	UN	2A	.0014	.6861	.6767	--------	.6455	.6407	.0048	.6094	2B	.620	.634	.6469	.6531	.0062	.6875
		3A	.0000	.6875	.6781	--------	.6469	.6433	.0036	.6108	3B	.6200	.6284	.6469	.6515	.0046	.6875
11⁄16–20 or .6875–20	UN	2A	.0013	.6862	.6781	--------	.6537	.6494	.0043	.6249	2B	.633	.645	.6550	.6606	.0056	.6875
		3A	.0000	.6875	.6794	--------	.6550	.6518	.0032	.6262	3B	.6330	.6412	.6550	.6592	.0042	.6875
11⁄16–24 or .6875–24	UNEF	2A	.0012	.6863	.6791	--------	.6592	.6552	.0040	.6352	2B	.642	.652	.6604	.6656	.0052	.6875
		3A	.0000	.6875	.6803	--------	.6604	.6574	.0030	.6364	3B	.6420	.6494	.6604	.6643	.0039	.6875
11⁄16–28 or .6875–28	UN	2A	.0011	.6864	.6799	--------	.6632	.6594	.0038	.6426	2B	.649	.657	.6643	.6692	.0049	.6875
		3A	.0000	.6875	.6810	--------	.6643	.6615	.0028	.6437	3B	.6490	.6551	.6643	.6680	.0037	.6875
11⁄16–32 or .6875–32	UN	2A	.0011	.6864	.6804	--------	.6661	.6625	.0036	.6481	2B	.654	.661	.6672	.6718	.0046	.6875
		3A	.0000	.6875	.6815	--------	.6672	.6645	.0027	.6492	3B	.6540	.6594	.6672	.6707	.0035	.6875
3⁄4–10 or .750–10	UNC	1A	.0018	.7482	.7288	--------	.6832	.6744	.0088	.6255	1B	.642	.663	.6850	.6965	.0115	.7500
		2A	.0018	.7482	.7353	.7288	.6832	.6773	.0059	.6255	2B	.642	.663	.6850	.6927	.0077	.7500
		3A	.0000	.7500	.7371	--------	.6850	.6806	.0044	.6273	3B	.6420	.6545	.6850	.6907	.0057	.7500
3⁄4–12 or .750–12	UN	2A	.0017	.7483	.7369	--------	.6942	.6887	.0055	.6461	2B	.660	.678	.6959	.7031	.0072	.7500
		3A	.0000	.7500	.7386	--------	.6959	.6918	.0041	.6478	3B	.6600	.6707	.6959	.7013	.0054	.7500
3⁄4–16 or .750–16	UNF	1A	.0015	.7485	.7343	--------	.7079	.7004	.0075	.6718	1B	.682	.696	.7094	.7192	.0098	.7500
		2A	.0015	.7485	.7391	--------	.7079	.7029	.0050	.6718	2B	.682	.696	.7094	.7159	.0065	.7500
		3A	.0000	.7500	.7406	--------	.7094	.7056	.0038	.6733	3B	.6820	.6908	.7094	.7143	.0049	.7500
3⁄4–20 or .750–20	UNEF	2A	.0013	.7487	.7406	--------	.7162	.7118	.0044	.6874	2B	.696	.707	.7175	.7232	.0057	.7500
		3A	.0000	.7500	.7419	--------	.7175	.7142	.0033	.6887	3B	.6960	.7037	.7175	.7218	.0043	.7500
3⁄4–28 or .750–28	UN	2A	.0012	.7488	.7423	--------	.7256	.7218	.0038	.7050	2B	.711	.720	.7268	.7318	.0050	.7500
		3A	.0000	.7500	.7435	--------	.7268	.7239	.0029	.7062	3B	.7110	.7176	.7268	.7305	.0037	.7500
3⁄4–32 or .750–32	UN	2A	.0011	.7489	.7429	--------	.7286	.7250	.0036	.7106	2B	.716	.724	.7297	.7344	.0047	.7500
		3A	.0000	.7500	.7440	--------	.7297	.7270	.0027	.7117	3B	.7160	.7219	.7297	.7333	.0036	.7500
13⁄16–12 or .8125–12	UN	2A	.0017	.8108	.7994	--------	.7567	.7512	.0055	.7086	2B	.722	.740	.7584	.7656	.0072	.8125
		3A	.0000	.8125	.8011	--------	.7584	.7543	.0041	.7103	3B	.7220	.7329	.7584	.7638	.0054	.8125
13⁄16–16 or .8125–16	UN	2A	.0015	.8110	.8016	--------	.7704	.7655	.0049	.7343	2B	.745	.759	.7719	.7782	.0063	.8125
		3A	.0000	.8125	.8031	--------	.7719	.7683	.0036	.7358	3B	.7450	.7533	.7719	.7766	.0047	.8125
13⁄16–20 or .8125–20	UNEF	2A	.0013	.8112	.8031	--------	.7787	.7743	.0044	.7499	2B	.758	.770	.7800	.7857	.0057	.8125
		3A	.0000	.8125	.8044	--------	.7800	.7767	.0033	.7512	3B	.7580	.7662	.7800	.7843	.0043	.8125
13⁄16–28 or .8125–28	UN	2A	.0012	.8113	.8048	--------	.7881	.7843	.0038	.7675	2B	.774	.782	.7893	.7943	.0050	.8125
		3A	.0000	.8125	.8060	--------	.7893	.7864	.0029	.7687	3B	.7740	.7801	.7893	.7930	.0037	.8125
13⁄16–32 or .8125–32	UN	2A	.0011	.8114	.8054	--------	.7911	.7875	.0036	.7731	2B	.779	.786	.7922	.7969	.0047	.8125
		3A	.0000	.8125	.8065	--------	.7922	.7895	.0027	.7742	3B	.7790	.7844	.7922	.7958	.0036	.8125
7⁄8–9 or .875–9	UNC	1A	.0019	.8731	.8523	--------	.8009	.7914	.0095	.7368	1B	.755	.778	.8028	.8151	.0123	.8750
		2A	.0019	.8731	.8592	.8523	.8009	.7946	.0063	.7368	2B	.755	.778	.8028	.8110	.0082	.8750
		3A	.0000	.8750	.8611	--------	.8028	.7981	.0047	.7387	3B	.7550	.7681	.8028	.8089	.0061	.8750
7⁄8–12 or .875–12	UN	2A	.0017	.8733	.8619	--------	.8192	.8137	.0055	.7711	2B	.785	.803	.8209	.8281	.0072	.8750
		3A	.0000	.8750	.8636	--------	.8209	.8168	.0041	.7728	3B	.7850	.7952	.8209	.8263	.0054	.8750
7⁄8–14 or .875–14	UNF	1A	.0016	.8734	.8579	--------	.8270	.8189	.0081	.7858	1B	.798	.814	.8286	.8392	.0106	.8750
		2A	.0016	.8734	.8631	--------	.8270	.8216	.0054	.7858	2B	.798	.814	.8286	.8356	.0070	.8750
		3A	.0000	.8750	.8647	--------	.8286	.8245	.0041	.7874	3B	.7980	.8068	.8286	.8339	.0053	.8750

See footnotes at end of table.

			External a								Internal a						
Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter d	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max b	Min	Min c	Max b	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
⅞–16 or .875–16	UN	2A	.0015	.8735	.8641	-------	.8329	.8280	.0049	.7968	2B	.807	.821	.8344	.8407	.0063	.8750
		3A	.0000	.8750	.8656		.8344	.8308	.0036	.7983	3B	.8070	.8158	.8344	.8391	.0047	.8750
⅞–20 or .875–20	UNEF	2A	.0013	.8737	.8656		.8412	.8368	.0044	.8124	2B	.821	.832	.8425	.8482	.0057	.8750
		3A	.0000	.8750	.8669		.8425	.8392	.0033	.8137	3B	.8210	.8287	.8425	.8468	.0043	.8750
⅞–28 or .875–28	UN	2A	.0012	.8738	.8673		.8506	.8468	.0038	.8300	2B	.836	.845	.8518	.8568	.0050	.8750
		3A	.0000	.8750	.8685		.8518	.8489	.0029	.8312	3B	.8360	.8426	.8518	.8555	.0037	.8750
⅞–32 or .875–32	UN	2A	.0011	.8739	.8679		.8536	.8500	.0036	.8356	2B	.841	.849	.8547	.8594	.0047	.8750
		3A	.0000	.8750	.8690		.8547	.8520	.0027	.8367	3B	.8410	.8469	.8547	.8583	.0036	.8750
15⁄16–12 or .9375–12	UN	2A	.0017	.9358	.9244		.8817	.8760	.0057	.8336	2B	.847	.865	.8834	.8908	.0074	.9375
		3A	.0000	.9375	.9261		.8834	.8792	.0042	.8353	3B	.8470	.8575	.8834	.8889	.0055	.9375
15⁄16–16 or .9375–16	UN	2A	.0015	.9360	.9266		.8954	.8904	.0050	.8593	2B	.870	.884	.8969	.9034	.0065	.9375
		3A	.0000	.9375	.9281		.8969	.8932	.0037	.8608	3B	.8700	.8783	.8969	.9018	.0049	.9375
15⁄16–20 or .9375–20	UNEF	2A	.0014	.9361	.9280		.9036	.8991	.0045	.8748	2B	.883	.895	.9050	.9109	.0059	.9375
		3A	.0000	.9375	.9294		.9050	.9016	.0034	.8762	3B	.8830	.8912	.9050	.9094	.0044	.9375
15⁄16–28 or .9375–28	UN	2A	.0012	.9363	.9298		.9131	.9091	.0040	.8925	2B	.899	.907	.9143	.9195	.0052	.9375
		3A	.0000	.9375	.9310		.9143	.9113	.0030	.8937	3B	.8990	.9051	.9143	.9182	.0039	.9375
15⁄16–32 or .9375–32	UN	2A	.0011	.9364	.9304		.9161	.9123	.0038	.8981	2B	.904	.911	.9172	.9221	.0049	.9375
		3A	.0000	.9375	.9315		.9172	.9144	.0028	.8992	3B	.9040	.9094	.9172	.9209	.0037	.9375
1–8 or 1.000–8	UNC	1A	.0020	.9980	.9755		.9168	.9067	.0101	.8446	1B	.865	.890	.9188	.9320	.0132	1.0000
		2A	.0020	.9980	.9830	.9755	.9168	.9100	.0068	.8446	2B	.865	.890	.9188	.9276	.0088	1.0000
		3A	.0000	1.0000	.9850		.9188	.9137	.0051	.8466	3B	.8650	.8797	.9188	.9254	.0066	1.0000
1–12 or 1.000–12	UNF	1A	.0018	.9982	.9810		.9441	.9353	.0088	.8960	1B	.910	.928	.9459	.9573	.0114	1.0000
		2A	.0018	.9982	.9868		.9441	.9382	.0059	.8960	2B	.910	.928	.9459	.9535	.0076	1.0000
		3A	.0000	1.0000	.9886		.9459	.9415	.0044	.8978	3B	.9100	.9198	.9459	.9516	.0057	1.0000
1–16 or 1.000–16	UN	2A	.0015	.9985	.9891		.9579	.9529	.0050	.9218	2B	.932	.946	.9594	.9659	.0065	1.0000
		3A	.0000	1.0000	.9906		.9594	.9557	.0037	.9233	3B	.9320	.9408	.9594	.9643	.0049	1.0000
1–20 or 1.000–20	UNEF	2A	.0014	.9986	.9905		.9661	.9616	.0045	.9373	2B	.946	.957	.9675	.9734	.0059	1.0000
		3A	.0000	1.0000	.9919		.9675	.9641	.0034	.9387	3B	.9460	.9537	.9675	.9719	.0044	1.0000
1–28 or 1.000–28	UN	2A	.0012	.9988	.9923		.9756	.9716	.0040	.9550	2B	.961	.970	.9768	.9820	.0052	1.0000
		3A	.0000	1.0000	.9935		.9768	.9738	.0030	.9562	3B	.9610	.9676	.9768	.9807	.0039	1.0000
1–32 or 1.000–32	UN	2A	.0011	.9989	.9929		.9786	.9748	.0038	.9606	2B	.966	.974	.9797	.9846	.0049	1.0000
		3A	.0000	1.0000	.9940		.9797	.9769	.0028	.9617	3B	.9660	.9719	.9797	.9834	.0037	1.0000
1¹⁄16–8 or 1.0625–8	UN	2A	.0020	1.0605	1.0455		.9793	.9725	.0068	.9071	2B	.927	.952	.9813	.9902	.0089	1.0625
		3A	.0000	1.0625	1.0475		.9813	.9762	.0051	.9091	3B	.9270	.9422	.9813	.9880	.0067	1.0625
1¹⁄16–12 or 1.0625–12	UN	2A	.0017	1.0608	1.0494		1.0067	1.0010	.0057	.9586	2B	.972	.990	1.0084	1.0158	.0074	1.0625
		3A	.0000	1.0625	1.0511		1.0084	1.0042	.0042	.9603	3B	.9720	.9823	1.0084	1.0139	.0055	1.0625
1¹⁄16–16 or 1.0625–16	UN	2A	.0015	1.0610	1.0516		1.0204	1.0154	.0050	.9843	2B	.995	1.009	1.0219	1.0284	.0065	1.0625
		3A	.0000	1.0625	1.0531		1.0219	1.0182	.0037	.9858	3B	.9950	1.0033	1.0219	1.0268	.0049	1.0625
1¹⁄16–18 or 1.0625–18	UNEF	2A	.0014	1.0611	1.0524		1.0250	1.0203	.0047	.9929	2B	1.002	1.015	1.0264	1.0326	.0062	1.0625
		3A	.0000	1.0625	1.0538		1.0264	1.0228	.0036	.9943	3B	1.0020	1.0105	1.0264	1.0310	.0046	1.0625
1¹⁄16–20 or 1.0625–20	UN	2A	.0014	1.0611	1.0530		1.0286	1.0241	.0045	.9998	2B	1.008	1.020	1.0300	1.0359	.0059	1.0625
		3A	.0000	1.0625	1.0544		1.0300	1.0266	.0034	1.0012	3B	1.0080	1.0162	1.0300	1.0344	.0044	1.0625
1¹⁄16–28 or 1.0625–28	UN	2A	.0012	1.0613	1.0548		1.0381	1.0341	.0040	1.0175	2B	1.024	1.032	1.0393	1.0445	.0052	1.0625
		3A	.0000	1.0625	1.0560		1.0393	1.0363	.0030	1.0187	3B	1.0240	1.0301	1.0393	1.0432	.0039	1.0625
1⅛–7 or 1.125–7	UNC	1A	.0022	1.1228	1.0982		1.0300	1.0191	.0109	.9475	1B	.970	.998	1.0322	1.0463	.0141	1.1250
		2A	.0022	1.1228	1.1064	1.0982	1.0300	1.0228	.0072	.9475	2B	.970	.998	1.0322	1.0416	.0094	1.1250
		3A	.0000	1.1250	1.1086		1.0322	1.0268	.0054	.9497	3B	.9700	.9875	1.0322	1.0393	.0071	1.1250
1⅛–8 or 1.125–8	UN	2A	.0021	1.1229	1.1079	1.1004	1.0417	1.0348	.0069	.9695	2B	.990	1.015	1.0438	1.0528	.0090	1.1250
		3A	.0000	1.1250	1.1100		1.0438	1.0386	.0052	.9716	3B	.9900	1.0047	1.0438	1.0505	.0067	1.1250
1⅛–12 or 1.125–12	UNF	1A	.0018	1.1232	1.1060		1.0691	1.0601	.0090	1.0210	1B	1.035	1.053	1.0709	1.0826	.0117	1.1250
		2A	.0018	1.1232	1.1118		1.0691	1.0631	.0060	1.0210	2B	1.035	1.053	1.0709	1.0787	.0078	1.1250
		3A	.0000	1.1250	1.1136		1.0709	1.0664	.0045	1.0228	3B	1.0350	1.0448	1.0709	1.0768	.0059	1.1250
1⅛–16 or 1.125–16	UN	2A	.0015	1.1235	1.1141		1.0829	1.0779	.0050	1.0468	2B	1.057	1.071	1.0844	1.0909	.0065	1.1250
		3A	.0000	1.1250	1.1156		1.0844	1.0807	.0037	1.0483	3B	1.0570	1.0658	1.0844	1.0893	.0049	1.1250
1⅛–18 or 1.125–18	UNEF	2A	.0014	1.1236	1.1149		1.0875	1.0828	.0047	1.0554	2B	1.065	1.078	1.0889	1.0951	.0062	1.1250
		3A	.0000	1.1250	1.1163		1.0889	1.0853	.0036	1.0568	3B	1.0650	1.0730	1.0889	1.0935	.0046	1.1250
1⅛–20 or 1.125–20	UN	2A	.0014	1.1236	1.1155		1.0911	1.0866	.0045	1.0623	2B	1.071	1.082	1.0925	1.0984	.0059	1.1250
		3A	.0000	1.1250	1.1169		1.0925	1.0891	.0034	1.0637	3B	1.0710	1.0787	1.0925	1.0969	.0044	1.1250

See footnotes at end of table.

Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max b	Min	Min c	Max b	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
1⅛–28 or 1.125–28	UN	2A 3A	.0012 .0000	1.1238 1.1250	1.1173 1.1185	--------	1.1006 1.1018	1.0966 1.0988	.0040 .0030	1.0800 1.0812	2B 3B	1.086 1.0860	1.095 1.0926	1.1018 1.1018	1.1070 1.1057	.0052 .0039	1.1250 1.1250
1³⁄₁₆–8 or 1.1875–8	UN	2A 3A	.0021 .0000	1.1854 1.1875	1.1704 1.1725	--------	1.1042 1.1063	1.0972 1.1011	.0070 .0052	1.0320 1.0341	2B 3B	1.052 1.0520	1.077 1.0672	1.1063 1.1063	1.1154 1.1131	.0091 .0068	1.1875 1.1875
1³⁄₁₆–12 or 1.1875–12	UN	2A 3A	.0017 .0000	1.1858 1.1875	1.1744 1.1761	--------	1.1317 1.1334	1.1259 1.1291	.0058 .0043	1.0836 1.0853	2B 3B	1.097 1.0970	1.115 1.1073	1.1334 1.1334	1.1409 1.1390	.0075 .0056	1.1875 1.1875
1³⁄₁₆–16 or 1.1875–16	UN	2A 3A	.0015 .0000	1.1860 1.1875	1.1766 1.1781	--------	1.1454 1.1469	1.1403 1.1431	.0051 .0038	1.1093 1.1108	2B 3B	1.120 1.1200	1.134 1.1283	1.1469 1.1469	1.1535 1.1519	.0066 .0050	1.1875 1.1875
1³⁄₁₆–18 or 1.1875–18	UNEF	2A 3A	.0015 .0000	1.1860 1.1875	1.1773 1.1788	--------	1.1499 1.1514	1.1450 1.1478	.0049 .0036	1.1178 1.1193	2B 3B	1.127 1.1270	1.140 1.1355	1.1514 1.1514	1.1577 1.1561	.0063 .0047	1.1875 1.1875
1³⁄₁₆–20 or 1.1875–20	UN	2A 3A	.0014 .0000	1.1861 1.1875	1.1780 1.1794	--------	1.1536 1.1550	1.1489 1.1515	.0047 .0035	1.1248 1.1262	2B 3B	1.133 1.1330	1.145 1.1412	1.1550 1.1550	1.1611 1.1595	.0061 .0045	1.1875 1.1875
1³⁄₁₆–28 or 1.1875–28	UN	2A 3A	.0012 .0000	1.1863 1.1875	1.1798 1.1810	--------	1.1631 1.1643	1.1590 1.1612	.0041 .0031	1.1425 1.1437	2B 3B	1.149 1.1490	1.157 1.1551	1.1643 1.1643	1.1696 1.1683	.0053 .0040	1.1875 1.1875
1¼–7 or 1.250–7	UNC	1A 2A 3A	.0022 .0022 .0000	1.2478 1.2478 1.2500	1.2232 1.2314 1.2336	1.2232	1.1550 1.1550 1.1572	1.1439 1.1476 1.1517	.0111 .0074 .0055	1.0725 1.0725 1.0747	1B 2B 3B	1.095 1.095 1.0950	1.123 1.123 1.1125	1.1572 1.1572 1.1572	1.1716 1.1668 1.1644	.0144 .0096 .0072	1.2500 1.2500 1.2500
1¼–8 or 1.250–8	UN	2A 3A	.0021 .0000	1.2479 1.2500	1.2329 1.2350	1.2254	1.1667 1.1688	1.1597 1.1635	.0070 .0053	1.0945 1.0966	2B 3B	1.115 1.1150	1.140 1.1297	1.1688 1.1688	1.1780 1.1757	.0092 .0069	1.2500 1.2500
1¼–12 or 1.250–12	UNF	1A 2A 3A	.0018 .0018 .0000	1.2482 1.2482 1.2500	1.2310 1.2368 1.2386	--------	1.1941 1.1941 1.1959	1.1849 1.1879 1.1913	.0092 .0062 .0046	1.1460 1.1460 1.1478	1B 2B 3B	1.160 1.160 1.1600	1.178 1.178 1.1698	1.1959 1.1959 1.1959	1.2079 1.2039 1.2019	.0120 .0080 .0060	1.2500 1.2500 1.2500
1¼–16 or 1.250–16	UN	2A 3A	.0015 .0000	1.2485 1.2500	1.2391 1.2406	--------	1.2079 1.2094	1.2028 1.2056	.0051 .0038	1.1718 1.1733	2B 3B	1.182 1.1820	1.196 1.1908	1.2094 1.2094	1.2160 1.2144	.0066 .0050	1.2500 1.2500
1¼–18 or 1.250–18	UNEF	2A 3A	.0015 .0000	1.2485 1.2500	1.2398 1.2413	--------	1.2124 1.2139	1.2075 1.2103	.0049 .0036	1.1803 1.1818	2B 3B	1.199 1.1900	1.203 1.1980	1.2139 1.2139	1.2202 1.2186	.0063 .0047	1.2500 1.2500
1¼–20 or 1.250–20	UN	2A 3A	.0014 .0000	1.2486 1.2500	1.2405 1.2419	--------	1.2161 1.2175	1.2114 1.2140	.0047 .0035	1.1873 1.1887	2B 3B	1.196 1.1960	1.207 1.2037	1.2175 1.2175	1.2236 1.2220	.0061 .0045	1.2500 1.2500
1¼–28 or 1.250–28	UN	2A 3A	.0012 .0000	1.2488 1.2500	1.2423 1.2435	--------	1.2256 1.2268	1.2215 1.2237	.0041 .0031	1.2050 1.2062	2B 3B	1.211 1.2110	1.220 1.2176	1.2268 1.2268	1.2321 1.2308	.0053 .0040	1.2500 1.2500
1⁵⁄₁₆–8 or 1.3125–8	UN	2A 3A	.0021 .0000	1.3104 1.3125	1.2954 1.2975	--------	1.2292 1.2313	1.2221 1.2260	.0071 .0053	1.1570 1.1591	2B 3B	1.177 1.1770	1.202 1.1922	1.2313 1.2313	1.2405 1.2382	.0092 .0069	1.3125 1.3125
1⁵⁄₁₆–12 or 1.3125–12	UN	2A 3A	.0017 .0000	1.3108 1.3125	1.2994 1.3011	--------	1.2567 1.2584	1.2509 1.2541	.0058 .0043	1.2086 1.2103	2B 3B	1.222 1.2220	1.240 1.2323	1.2584 1.2584	1.2659 1.2640	.0075 .0056	1.3125 1.3125
1⁵⁄₁₆–16 or 1.3125–16	UN	2A 3A	.0015 .0000	1.3110 1.3125	1.3016 1.3031	--------	1.2704 1.2719	1.2653 1.2681	.0051 .0038	1.2343 1.2358	2B 3B	1.245 1.2450	1.259 1.2533	1.2719 1.2719	1.2785 1.2769	.0066 .0050	1.3125 1.3125
1⁵⁄₁₆–18 or 1.3125–18	UNEF	2A 3A	.0015 .0000	1.3110 1.3125	1.3023 1.3038	--------	1.2749 1.2764	1.2700 1.2728	.0049 .0036	1.2428 1.2443	2B 3B	1.252 1.2520	1.265 1.2605	1.2764 1.2764	1.2827 1.2811	.0063 .0047	1.3125 1.3125
1⁵⁄₁₆–20 or 1.3125–20	UN	2A 3A	.9014 .0000	1.3111 1.3125	1.3030 1.3044	--------	1.2786 1.2800	1.2739 1.2765	.0047 .0035	1.2498 1.2512	2B 3B	1.258 1.2580	1.270 1.2662	1.2800 1.2800	1.2861 1.2845	.0061 .0045	1.3125 1.3125
1⁵⁄₁₆–28 or 1.3125–28	UN	2A 3A	.0012 .0000	1.3113 1.3125	1.3048 1.3060	--------	1.2881 1.2893	1.2840 1.2862	.0041 .0031	1.2675 1.2687	2B 3B	1.274 1.2740	1.282 1.2801	1.2893 1.2893	1.2946 1.2933	.0053 .0040	1.3125 1.3125
1⅜–6 or 1.375–6	UNC	1A 2A 3A	.0024 .0024 .0000	1.3726 1.3726 1.3750	1.3453 1.3544 1.3568	1.3453	1.2643 1.2643 1.2667	1.2523 1.2563 1.2607	.0120 .0080 .0060	1.1681 1.1681 1.1705	1B 2B 3B	1.195 1.195 1.1950	1.225 1.225 1.2146	1.2667 1.2667 1.2667	1.2822 1.2771 1.2745	.0155 .0104 .0078	1.3750 1.3750 1.3750
1⅜–8 or 1.375–8	UN	2A 3A	.0022 .0000	1.3728 1.3750	1.3578 1.3600	1.3503	1.2916 1.2938	1.2844 1.2884	.0072 .0054	1.2194 1.2216	2B 3B	1.240 1.2400	1.265 1.2547	1.2938 1.2938	1.3031 1.3008	.0093 .0070	1.3750 1.3750
1⅜–12 or 1.375–12	UNF	1A 2A 3A	.0019 .0019 .0000	1.3731 1.3731 1.3750	1.3559 1.3617 1.3636	--------	1.3190 1.3190 1.3209	1.3096 1.3127 1.3162	.0094 .0063 .0047	1.2709 1.2709 1.2728	1B 2B 3B	1.285 1.285 1.2850	1.303 1.303 1.2948	1.3209 1.3209 1.3209	1.3332 1.3291 1.3270	.0123 .0082 .0061	1.3750 1.3750 1.3750
1⅜–16 or 1.375–16	UN	2A 3A	.0015 .0000	1.3735 1.3750	1.3641 1.3656	--------	1.3329 1.3344	1.3278 1.3306	.0051 .0038	1.2968 1.2983	2B 3B	1.307 1.3070	1.321 1.3158	1.3344 1.3344	1.3410 1.3394	.0066 .0050	1.3750 1.3750
1⅜–18 or 1.375–18	UNEF	2A 3A	.0015 .000.	1.3735 1.3750	1.3648 1.3663	--------	1.3374 1.3389	1.3325 1.3353	.0049 .0036	1.3053 1.3068	2B 3B	1.315 1.3150	1.328 1.3230	1.3389 1.3389	1.3452 1.3436	.0063 .0047	1.3750 1.3750
1⅜–20 or 1.375–20	UN	2A 3A	.0014 .0000	1.3736 1.3750	1.3655 1.3669	--------	1.3411 1.3425	1.3364 1.3390	.0047 .0035	1.3123 1.3137	2B 3B	1.321 1.3210	1.332 1.3287	1.3425 1.3425	1.3486 1.3470	.0061 .0045	1.3750 1.3750

See footnotes at end of table.

				External [a]							Internal [a]						
Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1³⁄₈–28 or 1.375–28	UN	2A 3A	.0012 .0000	1.3738 1.3750	1.3673 1.3685	--------	1.3506 1.3518	1.3465 1.3487	.0041 .0031	1.3300 1.3312	2B 3B	1.336 1.3360	1.345 1.3426	1.3518 1.3518	1.3571 1.3558	.0053 .0040	1.3750 1.3750
1⁷⁄₁₆–6 or 1.4375–6	UN	2A 3A	.0024 .0000	1.4351 1.4375	1.4169 1.4193	--------	1.3268 1.3292	1.3188 1.3232	.0080 .0060	1.2306 1.2330	2B 3B	1.257 1.2570	1.288 1.2771	1.3292 1.3292	1.3396 1.3370	.0104 .0078	1.4375 1.4375
1⁷⁄₁₆–8 or 1.4375–8	UN	2A 3A	.0022 .0000	1.4353 1.4375	1.4203 1.4225	--------	1.3541 1.3563	1.3469 1.3509	.0072 .0054	1.2819 1.2841	2B 3B	1.302 1.3020	1.327 1.3172	1.3563 1.3563	1.3657 1.3634	.0094 .0071	1.4375 1.4375
1⁷⁄₁₆–12 or 1.4375–12	UN	2A 3A	.0018 .0000	1.4357 1.4375	1.4243 1.4261	--------	1.3816 1.3834	1.3757 1.3790	.0059 .0044	1.3335 1.3353	2B 3B	1.347 1.3470	1.365 1.3573	1.3834 1.3834	1.3910 1.3891	.0076 .0057	1.4375 1.4375
1⁷⁄₁₆–16 or 1.4375–16	UN	2A 3A	.0016 .0000	1.4359 1.4375	1.4265 1.4281	--------	1.3953 1.3969	1.3901 1.3930	.0052 .0039	1.3592 1.3608	2B 3B	1.370 1.3700	1.384 1.3783	1.3969 1.3969	1.4037 1.4020	.0068 .0051	1.4375 1.4375
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2A 3A	.0015 .0000	1.4360 1.4375	1.4273 1.4288	--------	1.3999 1.4014	1.3949 1.3977	.0050 .0037	1.3678 1.3693	2B 3B	1.377 1.3770	1.390 1.3855	1.4014 1.4014	1.4079 1.4062	.0065 .0048	1.4375 1.4375
1⁷⁄₁₆–20 or 1.4375–20	UN	2A 3A	.0014 .0000	1.4361 1.4375	1.4280 1.4294	--------	1.4036 1.4050	1.3988 1.4014	.0048 .0036	1.3748 1.3762	2B 3B	1.383 1.3830	1.395 1.3912	1.4050 1.4050	1.4112 1.4096	.0062 .0046	1.4375 1.4375
1⁷⁄₁₆–28 or 1.4375–28	UN	2A 3A	.0013 .0000	1.4362 1.4375	1.4297 1.4310	--------	1.4130 1.4143	1.4088 1.4112	.0042 .0031	1.3924 1.3937	2B 3B	1.399 1.3990	1.407 1.4051	1.4143 1.4143	1.4198 1.4184	.0055 .0041	1.4375 1.4375
1½–6 or 1.500–6	UNC	1A 2A 3A	.0024 .0024 .0000	1.4976 1.4976 1.5000	1.4703 1.4794 1.4818	1.4703 --------	1.3893 1.3893 1.3917	1.3772 1.3812 1.3856	.0121 .0081 .0061	1.2931 1.2931 1.2955	1B 2B 3B	1.320 1.320 1.3200	1.350 1.350 1.3396	1.3917 1.3917 1.3917	1.4075 1.4022 1.3996	.0158 .0105 .0079	1.5000 1.5000 1.5000
1½–8 or 1.500–8	UN	2A 3A	.0022 .0000	1.4978 1.5000	1.4828 1.4850	1.4753 --------	1.4166 1.4188	1.4093 1.4133	.0073 .0055	1.3444 1.3466	2B 3B	1.365 1.3650	1.390 1.3797	1.4188 1.4188	1.4283 1.4259	.0095 .0071	1.5000 1.5000
1½–12 or 1.500–12	UNF	1A 2A 3A	.0019 .0019 .0000	1.4981 1.4981 1.5000	1.4809 1.4867 1.4886	-------- --------	1.4440 1.4440 1.4459	1.4344 1.4376 1.4411	.0096 .0064 .0048	1.3959 1.3959 1.3978	1B 2B 3B	1.410 1.410 1.4100	1.428 1.428 1.4198	1.4459 1.4459 1.4459	1.4584 1.4542 1.4522	.0125 .0083 .0063	1.5000 1.5000 1.5000
1½–16 or 1.500–16	UN	2A 3A	.0016 .0000	1.4984 1.5000	1.4890 1.4906	--------	1.4578 1.4594	1.4526 1.4555	.0052 .0039	1.4217 1.4233	2B 3B	1.432 1.4320	1.446 1.4408	1.4594 1.4594	1.4662 1.4645	.0068 .0051	1.5000 1.5000
1½–18 or 1.500–18	UNEF	2A 3A	.0015 .0000	1.4985 1.5000	1.4898 1.4913	--------	1.4624 1.4639	1.4574 1.4602	.0050 .0037	1.4303 1.4318	2B 3B	1.440 1.4400	1.452 1.4480	1.4639 1.4639	1.4704 1.4687	.0065 .0048	1.5000 1.5000
1½–20 or 1.500–20	UN	2A 3A	.0014 .0000	1.4986 1.5000	1.4905 1.4919	--------	1.4661 1.4675	1.4613 1.4639	.0048 .0036	1.4373 1.4387	2B 3B	1.446 1.4460	1.457 1.4537	1.4675 1.4675	1.4737 1.4721	.0062 .0046	1.5000 1.5000
1½–28 or 1.500–28	UN	2A 3A	.0013 .0000	1.4987 1.5000	1.4922 1.4935	--------	1.4755 1.4768	1.4713 1.4737	.0042 .0031	1.4549 1.4562	2B 3B	1.461 1.4610	1.470 1.4676	1.4768 1.4768	1.4823 1.4809	.0055 .0041	1.5000 1.5000
1⁹⁄₁₆–6 or 1.5625–6	UN	2A 3A	.0024 .0000	1.5601 1.5625	1.5419 1.5443	--------	1.4518 1.4542	1.4436 1.4481	.0082 .0061	1.3556 1.3580	2B 3B	1.382 1.3820	1.413 1.4021	1.4542 1.4542	1.4648 1.4622	.0106 .0080	1.5625 1.5625
1⁹⁄₁₆–8 or 1.5625–8	UN	2A 3A	.0022 .0000	1.5603 1.5625	1.5453 1.5475	--------	1.4791 1.4813	1.4717 1.4758	.0074 .0055	1.4069 1.4091	2B 3B	1.427 1.4270	1.452 1.4422	1.4813 1.4813	1.4909 1.4885	.0096 .0072	1.5625 1.5625
1⁹⁄₁₆–12 or 1.5625–12	UN	2A 3A	.0018 .0000	1.5607 1.5625	1.5493 1.5511	--------	1.5066 1.5084	1.5007 1.5040	.0059 .0044	1.4585 1.4603	2B 3B	1.472 1.4720	1.490 1.4823	1.5084 1.5084	1.5160 1.5141	.0076 .0057	1.5625 1.5625
1⁹⁄₁₆–16 or 1.5625–16	UN	2A 3A	.0016 .0000	1.5609 1.5625	1.5515 1.5531	--------	1.5203 1.5219	1.5151 1.5180	.0052 .0039	1.4842 1.4858	2B 3B	1.495 1.4950	1.509 1.5033	1.5219 1.5219	1.5287 1.5270	.0068 .0051	1.5625 1.5625
1⁹⁄₁₆–18 or 1.5625–18	UNEF	2A 3A	.0015 .0000	1.5610 1.5625	1.5523 1.5538	--------	1.5249 1.5264	1.5199 1.5227	.0050 .0037	1.4928 1.4943	2B 3B	1.502 1.5020	1.515 1.5105	1.5264 1.5264	1.5329 1.5312	.0065 .0048	1.5625 1.5625
1⁹⁄₁₆–20 or 1.5625–20	UN	2A 3A	.0014 .0000	1.5611 1.5625	1.5530 1.5544	--------	1.5286 1.5300	1.5238 1.5264	.0048 .0036	1.4998 1.5012	2B 3B	1.508 1.5080	1.520 1.5162	1.5300 1.5300	1.5362 1.5346	.0062 .0046	1.5625 1.5625
1⅝–6 or 1.625–6	UN	2A 3A	.0025 .0000	1.6225 1.6250	1.6043 1.6068	--------	1.5142 1.5167	1.5060 1.5105	.0082 .0062	1.4180 1.4205	2B 3B	1.445 1.4450	1.475 1.4646	1.5167 1.5167	1.5274 1.5247	.0107 .0080	1.6250 1.6250
1⅝–8 or 1.625–8	UN	2A 3A	.0022 .0000	1.6228 1.6250	1.6078 1.6100	1.6003 --------	1.5416 1.5438	1.5342 1.5382	.0074 .0056	1.4694 1.4716	2B 3B	1.490 1.4900	1.515 1.5047	1.5438 1.5438	1.5535 1.5510	.0097 .0072	1.6250 1.6250
1⅝–12 or 1.625–12	UN	2A 3A	.0018 .0000	1.6232 1.6250	1.6118 1.6136	--------	1.5691 1.5709	1.5632 1.5665	.0059 .0044	1.5210 1.5228	2B 3B	1.535 1.5350	1.553 1.5448	1.5709 1.5709	1.5785 1.5766	.0076 .0057	1.6250 1.6250
1⅝–16 or 1.625–16	UN	2A 3A	.0016 .0000	1.6234 1.6250	1.6140 1.6156	--------	1.5828 1.5844	1.5776 1.5805	.0052 .0039	1.5467 1.5483	2B 3B	1.557 1.5570	1.571 1.5658	1.5844 1.5844	1.5912 1.5895	.0068 .0051	1.6250 1.6250
1⅝–18 or 1.625–18	UNEF	2A 3A	.0015 .0000	1.6235 1.6250	1.6148 1.6163	--------	1.5874 1.5889	1.5824 1.5852	.0050 .0037	1.5553 1.5568	2B 3B	1.565 1.5650	1.578 1.5730	1.5889 1.5889	1.5954 1.5937	.0065 .0048	1.6250 1.6250
1⅝–20 or 1.625–20	UN	2A 3A	.0014 .0000	1.6236 1.6250	1.6155 1.6169	--------	1.5911 1.5925	1.5863 1.5889	.0048 .0036	1.5623 1.5637	2B 3B	1.571 1.5710	1.582 1.5787	1.5925 1.5925	1.5987 1.5971	.0062 .0046	1.6250 1.6250

See footnotes at end of table.

		External [a]									Internal [a]						
				Major diameter limits			Pitch diameter limits			Minor diameter [d]		Minor diameter limits [e]		Pitch diameter limits			Major diameter
Nominal size and threads per inch	Series designation	Class	Allowance	Max [b]	Min	Min [c]	Max [b]	Min	Tolerance		Class	Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
1 11/16-6 or 1.6875-6	UN	2A	.0025	1.6850	1.6668	_____	1.5767	1.5684	.0083	1.4805	2B	1.507	1.538	1.5792	1.5900	.0108	1.6875
		3A	.0000	1.6875	1.6693	_____	1.5792	1.5730	.0062	1.4830	3B	1.5070	1.5271	1.5792	1.5873	.0081	1.6875
1 11/16-8 or 1.6875-8	UN	2A	.0022	1.6853	1.6703	_____	1.6041	1.5966	.0075	1.5319	2B	1.552	1.577	1.6063	1.6160	.0097	1.6875
		3A	.0000	1.6875	1.6725	_____	1.6063	1.6007	.0056	1.5341	3B	1.5520	1.5672	1.6063	1.6136	.0073	1.6875
1 11/16-12 or 1.6875-12	UN	2A	.0018	1.6857	1.6743	_____	1.6316	1.6256	.0060	1.5835	2B	1.597	1.615	1.6334	1.6412	.0078	1.6875
		3A	.0000	1.6875	1.6761	_____	1.6334	1.6289	.0045	1.5853	3B	1.5970	1.6073	1.6334	1.6392	.0058	1.6875
1 11/16-16 or 1.6875-16	UN	2A	.0016	1.6859	1.6765	_____	1.6453	1.6400	.0053	1.6092	2B	1.620	1.634	1.6469	1.6538	.0069	1.6875
		3A	.0000	1.6875	1.6781	_____	1.6469	1.6429	.0040	1.6108	3B	1.6200	1.6283	1.6469	1.6521	.0052	1.6875
1 11/16-18 or 1.6875-18	UNEF	2A	.0015	1.6860	1.6773	_____	1.6499	1.6448	.0051	1.6178	2B	1.627	1.640	1.6514	1.6580	.0066	1.6875
		3A	.0000	1.6875	1.6788	_____	1.6514	1.6476	.0038	1.6193	3B	1.6270	1.6355	1.6514	1.6563	.0049	1.6875
1 11/16-20 or 1.6875-20	UN	2A	.0015	1.6860	1.6779	_____	1.6535	1.6487	.0048	1.6247	2B	1.633	1.645	1.6550	1.6613	.0063	1.6875
		3A	.0000	1.6875	1.6786	_____	1.6550	1.6514	.0036	1.6262	3B	1.6330	1.6412	1.6550	1.6597	.0047	1.6875
1 3/4-5 or 1.750-5	UNC	1A	.0027	1.7473	1.7165	_____	1.6174	1.6040	.0134	1.5019	1B	1.534	1.568	1.6201	1.6375	.0174	1.7500
		2A	.0027	1.7473	1.7268	1.7165	1.6174	1.6085	.0089	1.5019	2B	1.534	1.568	1.6201	1.6317	.0116	1.7500
		3A	.0000	1.7500	1.7295	_____	1.6201	1.6134	.0067	1.5046	3B	1.5340	1.5575	1.6201	1.6288	.0087	1.7500
1 3/4-6 or 1.750-6	UN	2A	.0025	1.7475	1.7293	_____	1.6392	1.6309	.0083	1.5430	2B	1.570	1.600	1.6417	1.6525	.0108	1.7500
		3A	.0000	1.7500	1.7318	_____	1.6417	1.6354	.0063	1.5455	3B	1.5700	1.5896	1.6417	1.6498	.0081	1.7500
1 3/4-8 or 1.750-8	UN	2A	.0023	1.7477	1.7327	1.7252	1.6665	1.6590	.0075	1.5943	2B	1.615	1.640	1.6688	1.6786	.0098	1.7500
		3A	.0000	1.7500	1.7350	_____	1.6688	1.6631	.0057	1.5966	3B	1.6150	1.6297	1.6688	1.6762	.0074	1.7500
1 3/4-12 or 1.750-12	UN	2A	.0018	1.7482	1.7368	_____	1.6941	1.6881	.0060	1.6460	2B	1.660	1.678	1.6959	1.7037	.0078	1.7500
		3A	.0000	1.7500	1.7386	_____	1.6959	1.6914	.0045	1.6478	3B	1.6600	1.6698	1.6959	1.7017	.0058	1.7500
1 3/4-16 or 1.750-16	UN	2A	.0016	1.7484	1.7390	_____	1.7078	1.7025	.0053	1.6717	2B	1.682	1.696	1.7094	1.7163	.0069	1.7500
		3A	.0000	1.7500	1.7406	_____	1.7094	1.7054	.0040	1.6733	3B	1.6820	1.6908	1.7094	1.7146	.0052	1.7500
1 3/4-20 or 1.750-20	UN	2A	.0015	1.7485	1.7404	_____	1.7160	1.7112	.0048	1.6872	2B	1.696	1.707	1.7175	1.7238	.0063	1.7500
		3A	.0000	1.7500	1.7419	_____	1.7175	1.7139	.0036	1.6887	3B	1.6960	1.7037	1.7175	1.7222	.0047	1.7500
1 13/16-6 or 1.8125-6	UN	2A	.0025	1.8100	1.7918	_____	1.7017	1.6933	.0084	1.6055	2B	1.632	1.663	1.7042	1.7151	.0109	1.8125
		3A	.0000	1.8125	1.7943	_____	1.7042	1.6979	.0063	1.6080	3B	1.6320	1.6521	1.7042	1.7124	.0082	1.8125
1 13/16-8 or 1.8125-8	UN	2A	.0023	1.8102	1.7952	_____	1.7290	1.7214	.0076	1.6568	2B	1.677	1.702	1.7313	1.7412	0099	1.8125
		3A	.0000	1.8125	1.7975	_____	1.7313	1.7256	.0057	1.6591	3B	1.6770	1.6922	1.7313	1.7387	.0074	1.8125
1 13/16-12 or 1.8125-12	UN	2A	.0018	1.8107	1.7993	_____	1.7566	1.7506	.0060	1.7085	2B	1.722	1.740	1.7584	1.7662	.0078	1.8125
		3A	.0000	1.8125	1.8011	_____	1.7584	1.7539	.0045	1.7103	3B	1.7220	1.7323	1.7584	1.7642	.0058	1.8125
1 13/16-16 or 1.8125-16	UN	2A	.0016	1.8109	1.8015	_____	1.7703	1.7650	.0053	1.7342	2B	1.745	1.759	1.7719	1.7788	.0069	1.8125
		3A	.0000	1.8125	1.8031	_____	1.7719	1.7679	.0040	1.7358	3B	1.7450	1.7533	1.7719	1.7771	.0052	1.8125
1 13/16-20 or 1.8125-20	UN	2A	.0015	1.8110	1.8029	_____	1.7785	1.7737	.0048	1.7497	2B	1.758	1.770	1.7800	1.7863	.0063	1.8125
		3A	.0000	1.8125	1.8044	_____	1.7800	1.7764	.0036	1.7512	3B	1.7580	1.7662	1.7800	1.7847	.0047	1.8125
1 7/8-6 or 1.875-6	UN	2A	.0025	1.8725	1.8543	_____	1.7642	1.7558	.0084	1.6680	2B	1.695	1.725	1.7667	1.7777	.0110	1.8750
		3A	.0000	1.8750	1.8568	_____	1.7667	1.7604	.0063	1.6705	3B	1.6950	1.7146	1.7667	1.7749	.0082	1.8750
1 7/8-8 or 1.875-8	UN	2A	.0023	1.8727	1.8577	1.8502	1.7915	1.7838	.0077	1.7193	2B	1.740	1.765	1.7938	1.8038	.0100	1.8750
		3A	.0000	1.8750	1.8600	_____	1.7938	1.7881	.0057	1.7216	3B	1.7400	1.7547	1.7938	1.8013	.0075	1.8750
1 7/8-12 or 1.875-12	UN	2A	.0018	1.8732	1.8618	_____	1.8191	1.8131	.0060	1.7710	2B	1.785	1.803	1.8209	1.8287	.0078	1.8750
		3A	.0000	1.8750	1.8636	_____	1.8209	1.8164	.0045	1.7728	3B	1.7850	1.7948	1.8209	1.8267	.0058	1.8750
1 7/8-16 or 1.875-16	UN	2A	.0016	1.8734	1.8640	_____	1.8328	1.8275	.0053	1.7967	2B	1.807	1.821	1.8344	1.8413	.0069	1.8750
		3A	.0000	1.8750	1.8656	_____	1.8344	1.8304	.0040	1.7983	3B	1.8070	1.8158	1.8344	1.8396	.0052	1.8750
1 7/8-20 or 1.875-20	UN	2A	.0015	1.8735	1.8654	_____	1.8410	1.8362	.0048	1.8122	2B	1.821	1.832	1.8425	1.8488	.0063	1.8750
		3A	.0000	1.8750	1.8669	_____	1.8425	1.8389	.0036	1.8137	3B	1.8210	1.8287	1.8425	1.8472	.0047	1.8750
1 15/16-6 or 1.9375-6	UN	2A	.0026	1.9349	1.9167	_____	1.8266	1.8181	.0085	1.7304	2B	1.757	1.788	1.8292	1.8403	.0111	1.9375
		3A	.0000	1.9375	1.9193	_____	1.8292	1.8228	.0064	1.7330	3B	1.7570	1.7771	1.8292	1.8375	.0083	1.9375
1 15/16-8 or 1.9375-8	UN	2A	.0023	1.9352	1.9202	_____	1.8540	1.8463	.0077	1.7818	2B	1.802	1.827	1.8563	1.8663	.0100	1.9375
		3A	.0000	1.9375	1.9225	_____	1.8563	1.8505	.0058	1.7841	3B	1.8020	1.8172	1.8563	1.8638	.0075	1.9375
1 15/16-12 or 1.9375-12	UN	2A	.0018	1.9357	1.9243	_____	1.8816	1.8755	.0061	1.8335	2B	1.847	1.865	1.8834	1.8913	.0079	1.9375
		3A	.0000	1.9375	1.9261	_____	1.8834	1.8789	.0045	1.8353	3B	1.8470	1.8573	1.8834	1.8893	.0059	1.9375
1 15/16-16 or 1.9375-16	UN	2A	.0016	1.9359	1.9265	_____	1.8953	1.8899	.0054	1.8592	2B	1.870	1.884	1.8969	1.9039	.0070	1.9375
		3A	.0000	1.9375	1.9281	_____	1.8969	1.8929	.0040	1.8608	3B	1.8700	1.8783	1.8969	1.9021	.0052	1.9375
1 15/16-20 or 1.9375-20	UN	2A	.0015	1.9360	1.9279	_____	1.9035	1.8986	.0049	1.8747	2B	1.883	1.895	1.9050	1.9114	.0064	1.9375
		3A	.0000	1.9375	1.9294	_____	1.9050	1.9013	.0037	1.8762	3B	1.8830	1.8912	1.9050	1.9098	.0048	1.9375

See footnotes at end of table.

Table III.10.—Standard series limits of size—Unified screw threads—Continued

				External [a]								Internal [a]					
Nominal size and threads per inch	Series designation	Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
2–4½ or 2.000–4.5	UNC	1A 2A 3A	.0029 .0029 .0000	1.9971 1.9971 2.0000	1.9641 1.9751 1.9780	1.9641	1.8528 1.8528 1.8557	1.8385 1.8433 1.8486	.0143 .0095 .0071	1.7245 1.7245 1.7274	1B 2B 3B	1.759 1.759 1.7590	1.795 1.795 1.7861	1.8557 1.8557 1.8557	1.8743 1.8681 1.8650	.0186 .0124 .0093	2.0000 2.0000 2.0000
2–6 or 2.000–6	UN	2A 3A	.0026 .0000	1.9974 2.0000	1.9792 1.9818	_____	1.8891 1.8917	1.8805 1.8853	.0086 .0064	1.7929 1.7955	2B 3B	1.820 1.8200	1.850 1.8396	1.8917 1.8917	1.9028 1.9000	.0111 .0083	2.0000 2.0000
2–8 or 2.000–8	UN	2A 3A	.0023 .0000	1.9977 2.0000	1.9827 1.9850	1.9752	1.9165 1.9188	1.9087 1.9130	.0078 .0058	1.8443 1.8466	2B 3B	1.865 1.8650	1.890 1.8797	1.9188 1.9188	1.9289 1.9264	.0101 .0076	2.0000 2.0000
2–12 or 2.000–12	UN	2A 3A	.0018 .0000	1.9982 2.0000	1.9868 1.9886	_____	1.9441 1.9459	1.9380 1.9414	.0061 .0045	1.8960 1.8978	2B 3B	1.910 1.9100	1.928 1.9198	1.9459 1.9459	1.9538 1.9518	.0079 .0059	2.0000 2.0000
2–16 or 2.000–16	UN	2A 3A	.0016 .0000	1.9984 2.0000	1.9890 1.9906	_____	1.9578 1.9594	1.9524 1.9554	.0054 .0040	1.9217 1.9233	2B 3B	1.932 1.9320	1.946 1.9408	1.9594 1.9594	1.9664 1.9646	.0070 .0052	2.0000 2.0000
2–20 or 2.000–20	UN	2A 3A	.0015 .0000	1.9985 2.0000	1.9904 1.9919	_____	1.9660 1.9675	1.9611 1.9638	.0049 .0037	1.9372 1.9387	2B 3B	1.946 1.9460	1.957 1.9537	1.9675 1.9675	1.9739 1.9723	.0064 .0048	2.0000 2.0000
2⅛–6 or 2.125–6	UN	2A 3A	.0026 .0000	2.1224 2.1250	2.1042 2.1068	_____	2.0141 2.0167	2.0054 2.0102	.0087 .0065	1.9179 1.9205	2B 3B	1.945 1.9450	1.975 1.9646	2.0167 2.0167	2.0280 2.0251	.0113 .0084	2.1250 2.1250
2⅛–8 or 2.125–8	UN	2A 3A	.0024 .0000	2.1226 2.1250	2.1076 2.1100	2.1001	2.0414 2.0438	2.0335 2.0379	.0079 .0059	1.9692 1.9716	2B 3B	1.990 1.9900	2.015 2.0047	2.0438 2.0438	2.0540 2.0515	.0102 .0077	2.1250 2.1250
2⅛–12 or 2.125–12	UN	2A 3A	.0018 .0000	2.1232 2.1250	2.1118 2.1136	_____	2.0691 2.0709	2.0630 2.0664	.0061 .0045	2.0210 2.0228	2B 3B	2.035 2.0350	2.053 2.0448	2.0709 2.0709	2.0788 2.0768	.0079 .0059	2.1250 2.1250
2⅛–16 or 2.125–16	UN	2A 3A	.0016 .0000	2.1234 2.1250	2.1140 2.1156	_____	2.0828 2.0844	2.0774 2.0804	.0054 .0040	2.0467 2.0483	2B 3B	2.057 2.0570	2.071 2.0658	2.0844 2.0844	2.0914 2.0896	.0070 .0052	2.1250 2.1250
2⅛–20 or 2.125–20	UN	2A 3A	.0015 .0000	2.1235 2.1250	2.1154 2.1169	_____	2.0910 2.0925	2.0861 2.0888	.0049 .0037	2.0622 2.0637	2B 3B	2.071 2.0710	2.082 2.0787	2.0925 2.0925	2.0989 2.0973	.0064 .0048	2.1250 2.1250
2¼–4½ or 2.250–4.5	UNC	1A 2A 3A	.0029 .0029 .0000	2.2471 2.2471 2.2500	2.2141 2.2251 2.2280	2.2141	2.1028 2.1028 2.1057	2.0882 2.0931 2.0984	.0146 .0097 .0073	1.9745 1.9745 1.9774	1B 2B 3B	2.009 2.009 2.0090	2.045 2.045 2.0361	2.1057 2.1057 2.1057	2.1247 2.1183 2.1152	.0190 .0126 .0095	2.2500 2.2500 2.2500
2¼–6 or 2.250–6	UN	2A 3A	.0026 .0000	2.2474 2.2500	2.2292 2.2318	_____	2.1391 2.1417	2.1303 2.1351	.0088 .0066	2.0429 2.0455	2B 3B	2.070 2.0700	2.100 2.0896	2.1417 2.1417	2.1531 2.1502	.0114 .0085	2.2500 2.2500
2¼–8 or 2.250–8	UN	2A 3A	.0024 .0000	2.2476 2.2500	2.2326 2.2350	2.2251	2.1664 2.1688	2.1584 2.1628	.0080 .0060	2.0942 2.0966	2B 3B	2.115 2.1150	2.140 2.1297	2.1688 2.1688	2.1792 2.1766	.0104 .0078	2.2500 2.2500
2¼–12 or 2.250–12	UN	2A 3A	.0018 .0000	2.2482 2.2500	2.2368 2.2386	_____	2.1941 2.1959	2.1880 2.1914	.0061 .0045	2.1460 2.1478	2B 3B	2.160 2.1600	2.178 2.1698	2.1959 2.1959	2.2038 2.2018	.0079 .0059	2.2500 2.2500
2¼–16 or 2.250–16	UN	2A 3A	.0016 .0000	2.2484 2.2500	2.2390 2.2406	_____	2.2078 2.2094	2.2024 2.2054	.0054 .0040	2.1717 2.1733	2B 3B	2.182 2.1820	2.196 2.1908	2.2094 2.2094	2.2164 2.2146	.0070 .0052	2.2500 2.2500
2¼–20 or 2.250–20	UN	2A 3A	.0015 .0000	2.2485 2.2500	2.2404 2.2419	_____	2.2160 2.2175	2.2111 2.2138	.0049 .0037	2.1872 2.1887	2B 3B	2.196 2.1960	2.207 2.2037	2.2175 2.2175	2.2239 2.2223	.0064 .0048	2.2500 2.2500
2⅜–6 or 2.375–6	UN	2A 3A	.0027 .0000	2.3723 2.3750	2.3541 2.3568	_____	2.2640 2.2667	2.2551 2.2601	.0089 .0066	2.1678 2.1705	2B 3B	2.195 2.1950	2.226 2.2146	2.2667 2.2667	2.2782 2.2753	.0115 .0086	2.3750 2.3750
2⅜–8 or 2.375–8	UN	2A 3A	.0024 .0000	2.3726 2.3750	2.3576 2.3600	_____	2.2914 2.2938	2.2833 2.2878	.0081 .0060	2.2192 2.2216	2B 3B	2.240 2.2400	2.265 2.2547	2.2938 2.2938	2.3043 2.3017	.0105 .0079	2.3750 2.3750
2⅜–12 or 2.375–12	UN	2A 3A	.0019 .0000	2.3731 2.3750	2.3617 2.3636	_____	2.3190 2.3209	2.3128 2.3163	.0062 .0046	2.2709 2.2728	2B 3B	2.285 2.2850	2.303 2.2948	2.3209 2.3209	2.3290 2.3269	.0081 .0060	2.3750 2.3750
2⅜–16 or 2.375–16	UN	2A 3A	.0017 .0000	2.3733 2.3750	2.3639 2.3656	_____	2.3327 2.3344	2.3272 2.3303	.0055 .0041	2.2966 2.2983	2B 3B	2.307 2.3070	2.321 2.3158	2.3344 2.3344	2.3416 2.3398	.0072 .0054	2.3750 2.3750
2⅜–20 or 2.375–20	UN	2A 3A	.0015 .0000	2.3735 2.3750	2.3654 2.3669	_____	2.3410 2.3425	2.3359 2.3387	.0051 .0038	2.3122 2.3137	2B 3B	2.321 2.3210	2.332 2.3287	2.3425 2.3425	2.3491 2.3475	.0066 .0050	2.3750 2.3750
2½–4 or 2.500–4	UNC	1A 2A 3A	.0031 .0031 .0000	2.4969 2.4969 2.5000	2.4612 2.4731 2.4762	2.4612	2.3345 2.3345 2.3376	2.3190 2.3241 2.3298	.0155 .0104 .0078	2.1902 2.1902 2.1933	1B 2B 3B	2.229 2.229 2.2290	2.267 2.267 2.2594	2.3376 2.3376 2.3376	2.3578 2.3511 2.3477	.0202 .0135 .0101	2.5000 2.5000 2.5000
2½–6 or 2.500–6	UN	2A 3A	.0027 .0000	2.4973 2.5000	2.4791 2.4818	_____	2.3890 2.3917	2.3800 2.3850	.0090 .0067	2.2928 2.2955	2B 3B	2.320 2.3200	2.350 2.3396	2.3917 2.3917	2.4033 2.4004	.0116 .0087	2.5000 2.5000
2½–8 or 2.500–8	UN	2A 3A	.0024 .0000	2.4976 2.5000	2.4826 2.4850	2.4751	2.4164 2.4188	2.4082 2.4127	.0082 .0061	2.3442 2.3466	2B 3B	2.365 2.3650	2.390 2.3797	2.4188 2.4188	2.4294 2.4268	.0106 .0080	2.5000 2.5000
2½–12 or 2.500–12	UN	2A 3A	.0019 .0000	2.4981 2.5000	2.4867 2.4886	_____	2.4440 2.4459	2.4378 2.4413	.0062 .0046	2.3959 2.3978	2B 3B	2.410 2.4100	2.428 2.4198	2.4459 2.4459	2.4540 2.4519	.0081 .0060	2.5000 2.5000
2½–16 or 2.500–16	UN	2A 3A	.0017 .0000	2.4983 2.5000	2.4889 2.4906	_____	2.4577 2.4594	2.4522 2.4553	.0055 .0041	2.4216 2.4233	2B 3B	2.432 2.4320	2.446 2.4408	2.4594 2.4594	2.4666 2.4648	.0072 .0054	2.5000 2.5000

See footnotes at end of table.

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
2½-20 or 2.500-20	UN	2A	.0015	2.4985	2.4904	--------	2.4660	2.4609	.0051	2.4372	2B	2.446	2.457	2.4675	2.4741	.0066	2.5000
		3A	.0000	2.5000	2.4919	--------	2.4675	2.4637	.0038	2.4387	3B	2.4460	2.4537	2.4675	2.4725	.0050	2.5000
2⅝-6 or 2.625-6	UN	2A	.0027	2.6223	2.6041	--------	2.5140	2.5050	.0090	2.4178	2B	2.445	2.475	2.5167	2.5285	.0118	2.6250
		3A	.0000	2.6250	2.6068	--------	2.5167	2.5099	.0068	2.4205	3B	2.4450	2.4646	2.5167	2.5255	.0088	2.6250
2⅝-8 or 2.625-8	UN	2A	.0025	2.6225	2.6075	--------	2.5413	2.5331	.0082	2.4691	2B	2.490	2.515	2.5438	2.5545	.0107	2.6250
		3A	.0000	2.6250	2.6100	--------	2.5438	2.5376	.0062	2.4716	3B	2.4900	2.5047	2.5438	2.5518	.0080	2.6250
2⅝-12 or 2.625-12	UN	2A	.0019	2.6231	2.6117	--------	2.5690	2.5628	.0062	2.5209	2B	2.535	2.553	2.5709	2.5790	.0081	2.6250
		3A	.0000	2.6250	2.6136	--------	2.5709	2.5663	.0046	2.5228	3B	2.5350	2.5448	2.5709	2.5769	.0060	2.6250
2⅝-16 or 2.625-16	UN	2A	.0017	2.6233	2.6139	--------	2.5827	2.5772	.0055	2.5466	2B	2.557	2.571	2.5844	2.5916	.0072	2.6250
		3A	.0000	2.6250	2.6156	--------	2.5844	2.5803	.0041	2.5483	3B	2.5570	2.5658	2.5844	2.5898	.0054	2.6250
2⅝-20 or 2.625-20	UN	2A	.0015	2.6235	2.6154	--------	2.5910	2.5859	.0051	2.5622	2B	2.571	2.582	2.5925	2.5991	.0066	2.6250
		3A	.0000	2.6250	2.6169	--------	2.5925	2.5887	.0038	2.5637	3B	2.5710	2.5787	2.5925	2.5975	.0050	2.6250
2¾-4 or 2.750-4	UNC	1A	.0032	2.7468	2.7111	--------	2.5844	2.5686	.0158	2.4401	1B	2.479	2.517	2.5876	2.6082	.0206	2.7500
		2A	.0032	2.7468	2.7230	2.7111	2.5844	2.5739	.0105	2.4401	2B	2.479	2.517	2.5876	2.6013	.0137	2.7500
		3A	.0000	2.7500	2.7262	--------	2.5876	2.5797	.0079	2.4433	3B	2.4790	2.5094	2.5876	2.5979	.0103	2.7500
2¾-6 or 2.750-6	UN	2A	.0027	2.7473	2.7291	--------	2.6390	2.6299	.0091	2.5428	2B	2.570	2.600	2.6417	2.6536	.0119	2.7500
		3A	.0000	2.7500	2.7318	--------	2.6417	2.6349	.0068	2.5455	3B	2.5700	2.5896	2.6417	2.6506	.0089	2.7500
2¾-8 or 2.750-8	UN	2A	.0025	2.7475	2.7325	2.7250	2.6663	2.6580	.0083	2.5941	2B	2.615	2.640	2.6688	2.6796	.0108	2.7500
		3A	.0000	2.7500	2.7350	--------	2.6688	2.6625	.0063	2.5966	3B	2.6150	2.6297	2.6688	2.6769	.0081	2.7500
2¾-12 or 2.750-12	UN	2A	.0019	2.7481	2.7367	--------	2.6940	2.6878	.0062	2.6459	2B	2.660	2.678	2.6959	2.7040	.0081	2.7500
		3A	.0000	2.7500	2.7386	--------	2.6959	2.6913	.0046	2.6478	3B	2.6600	2.6698	2.6959	2.7019	.0060	2.7500
2¾-16 or 2.750-16	UN	2A	.0017	2.7483	2.7389	--------	2.7077	2.7022	.0055	2.6716	2B	2.682	2.696	2.7094	2.7166	.0072	2.7500
		3A	.0000	2.7500	2.7406	--------	2.7094	2.7053	.0041	2.6733	3B	2.6820	2.6908	2.7094	2.7148	.0054	2.7500
2¾-20 or 2.750-20	UN	2A	.0015	2.7485	2.7404	--------	2.7160	2.7109	.0051	2.6872	2B	2.696	2.707	2.7175	2.7241	.0066	2.7500
		3A	.0000	2.7500	2.7419	--------	2.7175	2.7137	.0038	2.6887	3B	2.6960	2.7037	2.7175	2.7225	.0050	2.7500
2⅞-6 or 2.875-6	UN	2A	.0028	2.8722	2.8540	--------	2.7639	2.7547	.0092	2.6677	2B	2.695	2.725	2.7667	2.7787	.0120	2.8750
		3A	.0000	2.8750	2.8568	--------	2.7667	2.7598	.0069	2.6705	3B	2.6950	2.7146	2.7667	2.7757	.0090	2.8750
2⅞-8 or 2.875-8	UN	2A	.0025	2.8725	2.8575	--------	2.7913	2.7829	.0084	2.7191	2B	2.740	2.765	2.7938	2.8048	.0110	2.8750
		3A	.0000	2.8750	2.8600	--------	2.7938	2.7875	.0063	2.7216	3B	2.7400	2.7547	2.7938	2.8020	.0082	2.8750
2⅞-12 or 2.875-12	UN	2A	.0019	2.8731	2.8617	--------	2.8190	2.8127	.0063	2.7709	2B	2.785	2.803	2.8209	2.8291	.0082	2.8750
		3A	.0000	2.8750	2.8636	--------	2.8209	2.8162	.0047	2.7728	3B	2.7850	2.7948	2.8209	2.8271	.0062	2.8750
2⅞-16 or 2.875-16	UN	2A	.0017	2.8733	2.8639	--------	2.8327	2.8271	.0056	2.7966	2B	2.807	2.821	2.8344	2.8417	.0073	2.8750
		3A	.0000	2.8750	2.8656	--------	2.8344	2.8302	.0042	2.7983	3B	2.8070	2.8158	2.8344	2.8399	.0055	2.8750
2⅞-20 or 2.875-20	UN	2A	.0016	2.8734	2.8653	--------	2.8409	2.8357	.0052	2.8121	2B	2.821	2.832	2.8425	2.8493	.0068	2.8750
		3A	.0000	2.8750	2.8669	--------	2.8425	2.8386	.0039	2.8137	3B	2.8210	2.8287	2.8425	2.8476	.0051	2.8750
3-4 or 3.000-4	UNC	1A	.0032	2.9968	2.9611	--------	2.8344	2.8183	.0161	2.6901	1B	2.729	2.767	2.8376	2.8585	.0209	3.0000
		2A	.0032	2.9968	2.9730	2.9611	2.8344	2.8237	.0107	2.6901	2B	2.729	2.767	2.8376	2.8515	.0139	3.0000
		3A	.0000	3.0000	2.9762	--------	2.8376	2.8296	.0080	2.6933	3B	2.7290	2.7594	2.8376	2.8480	.0104	3.0000
3-6 or 3.000-6	UN	2A	.0028	2.9972	2.9790	--------	2.8889	2.8796	.0093	2.7927	2B	2.820	2.850	2.8917	2.9038	.0121	3.0000
		3A	.0000	3.0000	2.9818	--------	2.8917	2.8847	.0070	2.7955	3B	2.8200	2.8396	2.8917	2.9008	.0091	3.0000
3-8 or 3.000-8	UN	2A	.0026	2.9974	2.9824	2.9749	2.9162	2.9077	.0085	2.8440	2B	2.865	2.890	2.9188	2.9299	.0111	3.0000
		3A	.0000	3.0000	2.9850	--------	2.9188	2.9124	.0064	2.8466	3B	2.8650	2.8797	2.9188	2.9271	.0083	3.0000
3-12 or 3.000-12	UN	2A	.0019	2.9981	2.9867	--------	2.9440	2.9377	.0063	2.8959	2B	2.910	2.928	2.9459	2.9541	.0082	3.0000
		3A	.0000	3.0000	2.9886	--------	2.9459	2.9412	.0047	2.8978	3B	2.9100	2.9198	2.9459	2.9521	.0062	3.0000
3-16 or 3.000-16	UN	2A	.0017	2.9983	2.9889	--------	2.9577	2.9521	.0056	2.9216	2B	2.932	2.946	2.9594	2.9667	.0073	3.0000
		3A	.0000	3.0000	2.9906	--------	2.9594	2.9552	.0042	2.9233	3B	2.9320	2.9408	2.9594	2.9649	.0055	3.0000
3-20 or 3.000-20	UN	2A	.0016	2.9984	2.9903	--------	2.9659	2.9607	.0052	2.9371	2B	2.946	2.957	2.9675	2.9743	.0068	3.0000
		3A	.0000	3.0000	2.9919	--------	2.9675	2.9636	.0039	2.9387	3B	2.9460	2.9537	2.9675	2.9726	.0051	3.0000
3⅛-6 or 3.125-6	UN	2A	.0028	3.1222	3.1040	--------	3.0139	3.0045	.0094	2.9177	2B	2.945	2.975	3.0167	3.0289	.0122	3.1250
		3A	.0000	3.1250	3.1068	--------	3.0167	3.0097	.0070	2.9205	3B	2.9450	2.9646	3.0167	3.0259	.0092	3.1250
3⅛-8 or 3.125-8	UN	2A	.0026	3.1224	3.1074	--------	3.0412	3.0326	.0086	2.9690	2B	2.990	3.015	3.0438	3.0550	.0112	3.1250
		3A	.0000	3.1250	3.1100	--------	3.0438	3.0374	.0064	2.9716	3B	2.9900	3.0047	3.0438	3.0522	.0084	3.1250
3⅛-12 or 3.125-12	UN	2A	.0019	3.1231	3.1117	--------	3.0690	3.0627	.0063	3.0209	2B	3.035	3.053	3.0709	3.0791	.0082	3.1250
		3A	.0000	3.1250	3.1136	--------	3.0709	3.0662	.0047	3.0228	3B	3.0350	3.0448	3.0709	3.0771	.0062	3.1250
3⅛-16 or 3.125-16	UN	2A	.0017	3.1233	3.1139	--------	3.0827	3.0771	.0056	3.0466	2B	3.057	3.071	3.0844	3.0917	.0073	3.1250
		3A	.0000	3.1250	3.1156	--------	3.0844	3.0802	.0042	3.0483	3B	3.0570	3.0658	3.0844	3.0899	.0055	3.1250

See footnotes at end of table.

Nominal size and threads per inch	Series designation	External[a]										Internal[a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter[d]	Class	Minor diameter limits[e]		Pitch diameter limits			Major diameter
				Max[b]	Min	Min[c]	Max[b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
3¼–4 or 3.250–4	UNC	1A	.0033	3.2467	3.2110	_____	3.0843	3.0680	.0163	2.9400	1B	2.979	3.017	3.0876	3.1088	.0212	3.2500
		2A	.0033	3.2467	3.2229	3.2110	3.0843	3.0734	.0109	2.9400	2B	2.979	3.017	3.0876	3.1017	.0141	3.2500
		3A	.0000	3.2500	3.2262	_____	3.0876	3.0794	.0082	2.9433	3B	2.9790	3.0094	3.0876	3.0982	.0106	3.2500
3¼–6 or 3.250–6	UN	2A	.0028	3.2472	3.2290	_____	3.1389	3.1294	.0095	3.0427	2B	3.070	3.100	3.1417	3.1540	.0123	3.2500
		3A	.0000	3.2500	3.2318	_____	3.1417	3.1346	.0071	3.0455	3B	3.0700	3.0896	3.1417	3.1509	.0092	3.2500
3¼–8 or 3.250–8	UN	2A	.0026	3.2474	3.2324	3.2249	3.1662	3.1575	.0087	3.0940	2B	3.115	3.140	3.1688	3.1801	.0113	3.2500
		3A	.0000	3.2500	3.2350	_____	3.1688	3.1623	.0065	3.0966	3B	3.1150	3.1297	3.1688	3.1773	.0085	3.2500
3¼–12 or 3.250–12	UN	2A	.0019	3.2481	3.2367	_____	3.1940	3.1877	.0063	3.1459	2B	3.160	3.178	3.1959	3.2041	.0082	3.2500
		3A	.0000	3.2500	3.2386	_____	3.1959	3.1912	.0047	3.1478	3B	3.1600	3.1698	3.1959	3.2021	.0062	3.2500
3¼–16 or 3.250–16	UN	2A	.0017	3.2483	3.2389	_____	3.2077	3.2021	.0056	3.1716	2B	3.182	3.196	3.2094	3.2167	.0073	3.2500
		3A	.0000	3.2500	3.2406	_____	3.2094	3.2052	.0042	3.1733	3B	3.1820	3.1908	3.2094	3.2149	.0055	3.2500
3⅜–6 or 3.375–6	UN	2A	.0029	3.3721	3.3539	_____	3.2638	3.2543	.0095	3.1676	2B	3.195	3.225	3.2667	3.2791	.0124	3.3750
		3A	.0000	3.3750	3.3568	_____	3.2667	3.2595	.0072	3.1705	3B	3.1950	3.2146	3.2667	3.2760	.0093	3.3750
3⅜–8 or 3.375–8	UN	2A	.0026	3.3724	3.3574	_____	3.2912	3.2824	.0088	3.2190	2B	3.240	3.265	3.2938	3.3052	.0114	3.3750
		3A	.0000	3.3750	3.3600	_____	3.2938	3.2872	.0066	3.2216	3B	3.2400	3.2547	3.2938	3.3023	.0085	3.3750
3⅜–12 or 3.375–12	UN	2A	.0019	3.3731	3.3617	_____	3.3190	3.3126	.0064	3.2709	2B	3.285	3.303	3.3209	3.3293	.0084	3.3750
		3A	.0000	3.3750	3.3636	_____	3.3209	3.3161	.0048	3.2728	3B	3.2850	3.2948	3.3209	3.3272	.0063	3.3750
3⅜–16 or 3.375–16	UN	2A	.0017	3.3733	3.3639	_____	3.3327	3.3269	.0058	3.2966	2B	3.307	3.321	3.3344	3.3419	.0075	3.3750
		3A	.0000	3.3750	3.3656	_____	3.3344	3.3301	.0043	3.2983	3B	3.3070	3.3158	3.3344	3.3400	.0056	3.3750
3½–4 or 3.500–4	UNC	1A	.0033	3.4967	3.4610	_____	3.3343	3.3177	.0166	3.1900	1B	3.229	3.267	3.3376	3.3591	.0215	3.5000
		2A	.0033	3.4967	3.4729	3.4610	3.3343	3.3233	.0110	3.1900	2B	3.229	3.267	3.3376	3.3519	.0143	3.5000
		3A	.0000	3.5000	3.4762	_____	3.3376	3.3293	.0083	3.1933	3B	3.2290	3.2594	3.3376	3.3484	.0108	3.5000
3½–6 or 3.500–6	UN	2A	.0029	3.4971	3.4789	_____	3.3888	3.3792	.0096	3.2926	2B	3.320	3.350	3.3917	3.4042	.0125	3.5000
		3A	.0000	3.5000	3.4818	_____	3.3917	3.3845	.0072	3.2955	3B	3.3200	3.3396	3.3917	3.4011	.0094	3.5000
3½–8 or 3.500–8	UN	2A	.0026	3.4974	3.4824	3.4749	3.4162	3.4074	.0088	3.3440	2B	3.365	3.390	3.4188	3.4303	.0115	3.5000
		3A	.0000	3.5000	3.4850	_____	3.4188	3.4122	.0066	3.3466	3B	3.3650	3.3797	3.4188	3.4274	.0086	3.5000
3½–12 or 2.500–12	UN	2A	.0019	3.4981	3.4867	_____	3.4440	3.4376	.0064	3.3959	2B	3.410	3.428	4.4459	3.4543	.0084	3.5000
		3A	.0000	3.5000	3.4886	_____	3.4459	3.4411	.0048	3.3978	3B	3.4100	3.4198	3.4459	3.4522	.0063	3.5000
3½–16 or 3.500–16	UN	2A	.0017	3.4983	3.4889	_____	3.4577	3.4519	.0058	3.4216	2B	3.432	3.446	3.4594	3.4669	.0075	3.5000
		3A	.0000	3.5000	3.4906	_____	3.4594	3.4551	.0043	3.4233	3B	3.4320	3.4408	3.4594	3.4650	.0056	3.5000
3⅝–6 or 3.625–6	UN	2A	.0029	3.6221	3.6039	_____	3.5138	3.5041	.0097	3.4176	2B	3.445	3.475	3.5167	3.5293	.0126	3.6250
		3A	.0000	3.6250	3.6068	_____	3.5167	3.5094	.0073	3.4205	3B	3.4450	3.4646	3.5167	3.5262	.0095	3.6250
3⅝–8 or 3.625–8	UN	2A	.0027	3.6223	3.6073	_____	3.5411	3.5322	.0089	3.4689	2B	3.490	3.515	3.5438	3.5554	.0116	3.6250
		3A	.0000	3.6250	3.6100	_____	3.5438	3.5371	.0067	3.4716	3B	3.4900	3.5047	3.5438	3.5525	.0087	3.6250
3⅝–12 or 3.625–12	UN	2A	.0019	3.6231	3.6117	_____	3.5690	3.5626	.0064	3.5209	2B	3.535	3.553	3.5709	3.5793	.0084	3.6250
		3A	.0000	3.6250	3.6136	_____	3.5709	3.5661	.0048	3.5228	3B	3.5350	3.5448	3.5709	3.5772	.0063	3.6250
3⅝–16 or 3.625–16	UN	2A	.0017	3.6233	3.6139	_____	3.5827	3.5769	.0058	3.5466	2B	3.557	3.571	3.5844	3.5919	.0075	3.6250
		3A	.0000	3.6250	3.6156	_____	3.5844	3.5801	.0043	3.5483	3B	3.5570	3.5658	3.5844	3.5900	.0056	3.6250
3¾–4 or 3.750–4	UNC	1A	.0034	3.7466	3.7109	_____	3.5842	3.5674	.0168	3.4399	1B	3.479	3.517	3.5876	3.6094	.0218	3.7500
		2A	.0034	3.7466	3.7228	3.7109	3.5842	3.5730	.0112	3.4399	2B	3.479	3.517	3.5876	3.6021	.0145	3.7500
		3A	.0000	3.7500	3.7262	_____	3.5876	3.5792	.0084	3.4433	3B	3.4790	3.5094	3.5876	3.5985	.0109	3.7500
3¾–6 or 3.750–6	UN	2A	.0029	3.7471	3.7289	_____	3.6388	3.6290	.0098	3.5426	2B	3.570	3.600	3.6417	3.6544	.0127	3.7500
		3A	.0000	3.7500	3.7318	_____	3.6417	3.6344	.0073	3.5455	3B	3.5700	3.5896	3.6417	3.6512	.0095	3.7500
3¾–8 or 3.750–8	UN	2A	.0027	3.7473	3.7323	3.7248	3.6661	3.6571	.0090	3.5939	2B	3.615	3.640	3.6688	3.6805	.0117	3.7500
		3A	.0000	3.7500	3.7350	_____	3.6688	3.6621	.0067	3.5966	3B	3.6150	3.6297	3.6688	3.6776	.0088	3.7500
3¾–12 or 3.750–12	UN	2A	.0019	3.7481	3.7367	_____	3.6940	3.6876	.0064	3.6459	2B	3.660	3.678	3.6959	3.7043	.0084	3.7500
		3A	.0000	3.7500	3.7386	_____	3.6959	3.6911	.0048	3.6478	3B	3.6600	3.6698	3.6959	3.7022	.0063	3.7500
3¾–16 or 3.750–16	UN	2A	.0017	3.7483	3.7389	_____	3.7077	3.7019	.0058	3.6716	2B	3.682	3.696	3.7094	3.7169	.0075	3.7500
		3A	.0000	3.7500	3.7406	_____	3.7094	3.7051	.0043	3.6733	3B	3.6820	3.6908	3.7094	3.7150	.0056	3.7500
3⅞–6 or 3.875–6	UN	2A	.0030	3.8720	3.8538	3.8750	3.7637	3.7538	.0099	3.6675	2B	3.695	3.725	3.7667	3.7795	.0128	3.8750
		3A	.0000	3.8750	3.8568	_____	3.7667	3.7593	.0074	3.6705	3B	3.6950	3.7146	3.7667	3.7763	.0096	3.8750
3⅞–8 or 3.875–8	UN	2A	.0027	3.8723	3.8573	_____	3.7911	3.7820	.0091	3.7189	2B	3.740	3.765	3.7938	3.8056	.0118	3.8750
		3A	.0000	3.8750	3.8600	_____	3.7938	3.7870	.0068	3.7216	3B	3.7400	3.7547	3.7938	3.8026	.0088	3.8750
3⅞–12 or 3.875–12	UN	2A	.0020	3.8730	3.8616	_____	3.8189	3.8124	.0065	3.7708	2B	3.785	3.803	3.8209	3.8294	.0085	3.8750
		3A	.0000	3.8750	3.8636	_____	3.8209	3.8160	.0049	3.7728	3B	3.7850	3.7948	3.8209	3.8273	.0064	3.8750
3⅞–16 or 3.875–16	UN	2A	.0018	3.8732	3.8638	_____	3.8326	3.8267	.0059	3.7965	2B	3.807	3.821	3.8344	3.8420	.0076	3.8750
		3A	.0000	3.8750	3.8656	_____	3.8344	3.8300	.0044	3.7983	3B	3.8070	3.8158	3.8344	3.8401	.0057	3.8750

See footnotes at end of table.

Nominal size and threads per inch	Series designation	External									Internal						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
4–4 or 4.000–4	UNC	1A	.0034	3.9966	3.9609		3.8342	3.8172	.0170	3.6899	1B	3.729	3.767	3.8376	3.8597	.0221	4.0000
		2A	.0034	3.9966	3.9728	3.9609	3.8342	3.8229	.0113	3.6899	2B	3.729	3.767	3.8376	3.8523	.0147	4.0000
		3A	.0000	4.0000	3.9762		3.8376	3.8291	.0085	3.6933	3B	3.7290	3.7594	3.8376	3.8487	.0111	4.0000
4–6 or 4.000–6	UN	2A	.0030	3.9970	3.9788		3.8887	3.8788	.0099	3.7925	2B	3.820	3.850	3.8917	3.9046	.0129	4.0000
		3A	.0000	4.0000	3.9818		3.8917	3.8843	.0074	3.7955	3B	3.8200	3.8396	3.8917	3.9014	.0097	4.0000
4–8 or 4.000–8	UN	2A	.0027	3.9973	3.9823	3.9748	3.9161	3.9070	.0091	3.8439	2B	3.865	3.890	3.9188	3.9307	.0119	4.0000
		3A	.0000	4.0000	3.9850		3.9188	3.9120	.0068	3.8466	3B	3.8650	3.8797	3.9188	3.9277	.0089	4.0000
4–12 or 4.000–12	UN	2A	.0020	3.9980	3.9866		3.9439	3.9374	.0065	3.8958	2B	3.910	3.928	3.9459	3.9544	.0085	4.0000
		3A	.0000	4.0000	3.9886		3.9459	3.9410	.0049	3.8978	3B	3.9100	3.9198	3.9459	3.9523	.0064	4.0000
4–16 or 4.000–16	UN	2A	.0018	3.9982	3.9888		3.9576	3.9517	.0059	3.9215	2B	3.932	3.946	3.9594	3.9670	.0076	4.0000
		3A	.0000	4.0000	3.9906		3.9594	3.9550	.0044	3.9233	3B	3.9320	3.9408	3.9594	3.9651	.0057	4.0000
4⅛–6 or 4.125–6	UN	2A	.0030	4.1220	4.1038		4.0137	4.0037	.0100	3.9175	2B	3.945	3.975	4.0167	4.0297	.0130	4.1250
		3A	.0000	4.1250	4.1068		4.0167	4.0092	.0075	3.9205	3B	3.9450	3.9646	4.0167	4.0264	.0097	4.1250
4⅛–12 or 4.125–12	UN	2A	.0020	4.1230	4.1116		4.0689	4.0624	.0065	4.0208	2B	4.035	4.053	4.0709	4.0794	.0085	4.1250
		3A	.0000	4.1250	4.1136		4.0709	4.0660	.0049	4.0228	3B	4.0350	4.0448	4.0709	4.0773	.0064	4.1250
4⅛–16 or 4.125–16	UN	2A	.0018	4.1232	4.1138		4.0826	4.0767	.0059	4.0465	2B	4.057	4.071	4.0844	4.0920	.0076	4.1250
		3A	.0000	4.1250	4.1156		4.0844	4.0800	.0044	4.0483	3B	4.0570	4.0658	4.0844	4.0901	.0057	4.1250
4¼–4 or 4.250–4	UN	2A	.0034	4.2466	4.2228		4.0842	4.0727	.0115	3.9399	2B	3.979	4.017	4.0876	4.1025	.0149	4.2500
		3A	.0000	4.2500	4.2262		4.0876	4.0790	.0086	3.9433	3B	3.9790	4.0094	4.0876	4.0988	.0112	4.2500
4¼–6 or 4.250–6	UN	2A	.0030	4.2470	4.2288		4.1387	4.1286	.0101	4.0425	2B	4.070	4.100	4.1417	4.1548	.0131	4.2500
		3A	.0000	4.2500	4.2318		4.1417	4.1342	.0075	4.0455	3B	4.0700	4.0896	4.1417	4.1515	.0098	4.2500
4¼–12 or 4.250–12	UN	2A	.0020	4.2480	4.2366		4.1939	4.1874	.0065	4.1458	2B	4.160	4.178	4.1959	4.2044	.0085	4.2500
		3A	.0000	4.2500	4.2386		4.1959	4.1910	.0049	4.1478	3B	4.1600	4.1698	4.1959	4.2023	.0064	4.2500
4¼–16 or 4.250–16	UN	2A	.0018	4.2482	4.2388		4.2076	4.2017	.0059	4.1715	2B	4.182	4.196	4.2094	4.2170	.0076	4.2500
		3A	.0000	4.2500	4.2406		4.2094	4.2050	.0044	4.1733	3B	4.1820	4.1908	4.2094	4.2151	.0057	4.2500
4⅜–6 or 4.375–6	UN	2A	.0030	4.3720	4.3538		4.2637	4.2536	.0101	4.1675	2B	4.195	4.225	4.2667	4.2799	.0132	4.3750
		3A	.0000	4.3750	4.3568		4.2667	4.2591	.0076	4.1705	3B	4.1950	4.2146	4.2667	4.2766	.0099	4.3750
4⅜–12 or 4.375–12	UN	2A	.0020	4.3730	4.3616		4.3189	4.3124	.0065	4.2708	2B	4.285	4.303	4.3209	4.3294	.0085	4.3750
		3A	.0000	4.3750	4.3636		4.3209	4.3160	.0049	4.2728	3B	4.2850	4.2948	4.3209	4.3273	.0064	4.3750
4⅜–16 or 4.375–16	UN	2A	.0018	4.3732	4.3638		4.3326	4.3267	.0059	4.2965	2B	4.307	4.321	4.3344	4.3420	.0076	4.3750
		3A	.0000	4.3750	4.3656		4.3344	4.3300	.0044	4.2983	3B	4.3070	4.3158	4.3344	4.3401	.0057	4.3750
4½–4 or 4.500–4	UN	2A	.0035	4.4965	4.4727		4.3341	4.3225	.0116	4.1898	2B	4.229	4.267	4.3376	4.3527	.0151	4.5000
		3A	.0000	4.5000	4.4762		4.3376	4.3289	.0087	4.1933	3B	4.2290	4.2594	4.3376	4.3489	.0113	4.5000
4½–6 or 4.500–6	UN	2A	.0031	4.4969	4.4787		4.3886	4.3784	.0102	4.2924	2B	4.320	4.350	4.3917	4.4050	.0133	4.5000
		3A	.0000	4.5000	4.4818		4.3917	4.3840	.0077	4.2955	3B	4.3200	4.3396	4.3917	4.4016	.0099	4.5000
4½–12 or 4.500–12	UN	2A	.0020	4.4980	4.4866		4.4439	4.4374	.0065	4.3958	2B	4.410	4.428	4.4459	4.4544	.0085	4.5000
		3A	.0000	4.5000	4.4886		4.4459	4.4410	.0049	4.3978	3B	4.4100	4.4198	4.4459	4.4523	.0064	4.5000
4½–16 or 4.500–16	UN	2A	.0018	4.4982	4.4888		4.4576	4.4517	.0059	4.4215	2B	4.432	4.446	4.4594	4.4670	.0076	4.5000
		3A	.0000	4.5000	4.4906		4.4594	4.4550	.0044	4.4233	3B	4.4320	4.4408	4.4594	4.4651	.0057	4.5000
4⅝–6 or 4.625–6	UN	2A	.0031	4.6219	4.6037		4.5136	4.5033	.0103	4.4174	2B	4.445	4.475	4.5167	4.5300	.0133	4.6250
		3A	.0000	4.6250	4.6068		4.5167	4.5090	.0077	4.4205	3B	4.4450	4.4646	4.5167	4.5267	.0100	4.6250
4⅝–12 or 4.625–12	UN	2A	.0020	4.6230	4.6116		4.5689	4.5622	.0067	4.5208	2B	4.535	4.553	4.5709	4.5796	.0087	4.6250
		3A	.0000	4.6250	4.6136		4.5709	4.5659	.0050	4.5228	3B	4.5350	4.5448	4.5709	4.5775	.0066	4.6250
4⅝–16 or 4.625–16	UN	2A	.0018	4.6232	4.6138		4.5826	4.5765	.0061	4.5465	2B	4.557	4.571	4.5844	4.5923	.0079	4.6250
		3A	.0000	4.6250	4.6156		4.5844	4.5799	.0045	4.5483	3B	4.5570	4.5658	4.5844	4.5903	.0059	4.6250
4¾–4 or 4.750–4	UN	2A	.0035	4.7465	4.7227		4.5841	4.5724	.0117	4.4398	2B	4.479	4.517	4.5876	4.6029	.0153	4.7500
		3A	.0000	4.7500	4.7262		4.5876	4.5788	.0088	4.4433	3B	4.4790	4.5094	4.5876	4.5990	.0114	4.7500
4¾–6 or 4.750–6	UN	2A	.0031	4.7469	4.7287		4.6386	4.6283	.0103	4.5424	2B	4.570	4.600	4.6417	4.6551	.0134	4.7500
		3A	.0000	4.7500	4.7318		4.6417	4.6340	.0077	4.5455	3B	4.5700	4.5896	4.6417	4.6518	.0101	4.7500
4¾–12 or 4.750–12	UN	2A	.0020	4.7480	4.7366		4.6939	4.6872	.0067	4.6458	2B	4.660	4.678	4.6959	4.7046	.0087	4.7500
		3A	.0000	4.7500	4.7386		4.6959	4.6909	.0050	4.6478	3B	4.6600	4.6698	4.6959	4.7025	.0066	4.7500
4¾–16 or 4.750–16	UN	2A	.0018	4.7482	4.7388		4.7076	4.7015	.0061	4.6715	2B	4.682	4.696	4.7094	4.7173	.0079	4.7500
		3A	.0000	4.7500	4.7406		4.7094	4.7049	.0045	4.6733	3B	4.6820	4.6908	4.7094	4.7153	.0059	4.7500
4⅞–6 or 4.875–6	UN	2A	.0031	4.8719	4.8537		4.7636	4.7532	.0104	4.6674	2B	4.695	4.725	4.7667	4.7802	.0135	4.8750
		3A	.0000	4.8750	4.8568		4.7667	4.7589	.0078	4.6705	3B	4.6950	4.7146	4.7667	4.7768	.0101	4.8750
4⅞–12 or 4.875–12	UN	2A	.0020	4.8730	4.8616		4.8189	4.8122	.0067	4.7708	2B	4.785	4.803	4.8209	4.8296	.0087	4.8750
		3A	.0000	4.8750	4.8636		4.8209	4.8159	.0050	4.7728	3B	4.7850	4.7948	4.8209	4.8275	.0066	4.8750

See footnotes at end of table.

Nominal size and threads per inch	Series designation	External[a]										Internal[a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter[d]	Class	Minor diameter limits[e]		Pitch diameter limits			Major diameter
				Max[b]	Min	Min[c]	Max[b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
4⅞-16 or 4.875-16	UN	2A	.0018	4.8732	4.8638	--------	4.8326	4.8265	.0061	4.7965	2B	4.807	4.821	4.8344	4.8423	.0079	4.8750
		3A	.0000	4.8750	4.8656	--------	4.8344	4.8299	.0045	4.7983	3B	4.8070	4.8158	4.8344	4.8403	.0059	4.8750
5-4 or 5.000-4	UN	2A	.0036	4.9964	4.9726	--------	4.8340	4.8221	.0119	4.6897	2B	4.729	4.767	4.8376	4.8530	.0154	5.0000
		3A	.0000	5.0000	4.9762	--------	4.8376	4.8287	.0089	4.6933	3B	4.7290	4.7594	4.8376	4.8492	.0116	5.0000
5-6 or 5.000-6	UN	2A	.0031	4.9969	4.9787	--------	4.8886	4.8781	.0105	4.7924	2B	4.820	4.850	4.8917	4.9053	.0136	5.0000
		3A	.0000	5.0000	4.9818	--------	4.8917	4.8839	.0078	4.7955	3B	4.8200	4.8396	4.8917	4.9019	.0102	5.0000
5-12 or 5.000-12	UN	2A	.0020	4.9980	4.9866	--------	4.9439	4.9372	.0067	4.8958	2B	4.910	4.928	4.9459	4.9546	.0087	5.0000
		3A	.0000	5.0000	4.9886	--------	4.9459	4.9409	.0050	4.8978	3B	4.9100	4.9198	4.9459	4.9525	.0066	5.0000
5-16 or 5.000-16	UN	2A	.0018	4.9982	4.9888	--------	4.9576	4.9515	.0061	4.9215	2B	4.932	4.946	4.9594	4.9673	.0079	5.0000
		3A	.0000	5.0000	4.9906	--------	4.9594	4.9549	.0045	4.9233	3B	4.9320	4.9408	4.9594	4.9653	.0059	5.0000
5⅛-12 or 5.125-12	UN	2A	.0020	5.1230	5.1116	--------	5.0689	5.0622	.0067	5.0208	2B	5.035	5.053	5.0709	5.0796	.0087	5.1250
		3A	.0000	5.1250	5.1136	--------	5.0709	5.0659	.0050	5.0228	3B	5.0350	5.0448	5.0709	5.0775	.0066	5.1250
5⅛-16 or 5.125-16	UN	2A	.0018	5.1232	5.1138	--------	5.0826	5.0765	.0061	5.0465	2B	5.057	5.071	5.0844	5.0923	.0079	5.1250
		3A	.0000	5.1250	5.1156	--------	5.0844	5.0799	.0045	5.0483	3B	5.0570	5.0658	5.0844	5.0903	.0059	5.1250
5¼-4 or 5.250-4	UN	2A	.0036	5.2464	5.2226	--------	5.0840	5.0720	.0120	4.9397	2B	4.979	5.017	5.0876	5.1032	.0156	5.2500
		3A	.0000	5.2500	5.2262	--------	5.0876	5.0786	.0090	4.9433	3B	4.9790	5.0094	5.0876	5.0993	.0117	5.2500
5¼-12 or 5.250-12	UN	2A	.0020	5.2480	5.2366	--------	5.1939	5.1872	.0067	5.1458	2B	5.160	5.178	5.1959	5.2046	.0087	5.2500
		3A	.0000	5.2500	5.2386	--------	5.1959	5.1909	.0050	5.1478	3B	5.1600	5.1698	5.1959	5.2025	.0066	5.2500
5¼-16 or 5.250-16	UN	2A	.0018	5.2482	5.2388	--------	5.2076	5.2015	.0061	5.1715	2B	5.182	5.196	5.2094	5.2173	.0079	5.2500
		3A	.0000	5.2500	5.2406	--------	5.2094	5.2049	.0045	5.1733	3B	5.1820	5.1908	5.2094	5.2153	.0059	5.2500
5⅜-12 or 5.375-12	UN	2A	.0020	5.3730	5.3616	--------	5.3189	5.3122	.0067	5.2708	2B	5.285	5.303	5.3209	5.3296	.0087	5.3750
		3A	.0000	5.3750	5.3636	--------	5.3209	5.3159	.0050	5.2728	3B	5.2850	5.2948	5.3209	5.3275	.0066	5.3750
5⅜-16 or 5.375-16	UN	2A	.0018	5.3732	5.3638	--------	5.3326	5.3265	.0061	5.2965	2B	5.307	5.321	5.3344	5.3423	.0079	5.3750
		3A	.0000	5.3750	5.3656	--------	5.3344	5.3299	.0045	5.2983	3B	5.3070	5.3158	5.3344	5.3403	.0059	5.3750
5½-4 or 5.500-4	UN	2A	.0036	5.4964	5.4726	--------	5.3340	5.3219	.0121	5.1897	2B	5.229	5.267	5.3376	5.3534	.0158	5.5000
		3A	.0000	5.5000	5.4762	--------	5.3376	5.3285	.0091	5.1933	3B	5.2290	5.2594	5.3376	5.3494	.0118	5.5000
5½-12 or 5.500-12	UN	2A	.0020	5.4980	5.4866	--------	5.4439	5.4372	.0067	5.3958	2B	5.410	5.428	5.4459	5.4546	.0087	5.5000
		3A	.0000	5.5000	5.4886	--------	5.4459	5.4409	.0050	5.3978	3B	5.4100	5.4198	5.4459	5.4525	.0066	5.5000
5½-16 or 5.500-16	UN	2A	.0018	5.4982	5.4888	--------	5.4576	5.4515	.0061	5.4215	2B	5.432	5.446	5.4594	5.4673	.0079	5.5000
		3A	.0000	5.5000	5.4906	--------	5.4594	5.4549	.0045	5.4233	3B	5.4320	5.4408	5.4594	5.4653	.0059	5.5000
5⅝-12 or 5.625-12	UN	2A	.0021	5.6229	5.6115	--------	5.5688	5.5619	.0069	5.5207	2B	5.535	5.553	5.5709	5.5799	.0090	5.6250
		3A	.0000	5.6250	5.6136	--------	5.5709	5.5657	.0052	5.5228	3B	5.5350	5.5448	5.5709	5.5776	.0067	5.6250
5⅝-16 or 5.625-16	UN	2A	.0019	5.6231	5.6137	--------	5.5825	5.5763	.0062	5.5464	2B	5.557	5.571	5.5844	5.5925	.0081	5.6250
		3A	.0000	5.6250	5.6156	--------	5.5844	5.5797	.0047	5.5483	3B	5.5570	5.5658	5.5844	5.5905	.0061	5.6250
5¾-4 or 5.750-4	UN	2A	.0037	5.7463	5.7225	--------	5.5839	5.5717	.0122	5.4396	2B	5.479	5.517	5.5876	5.6035	.0159	5.7500
		3A	.0000	5.7500	5.7262	--------	5.5876	5.5784	.0092	5.4433	3B	5.4790	5.5094	5.5876	5.5995	.0119	5.7500
5¾-12 or 5.750-12	UN	2A	.0021	5.7479	5.7365	--------	5.6938	5.6869	.0069	5.6457	2B	5.660	5.678	5.6959	5.7049	.0090	5.7500
		3A	.0000	5.7500	5.7386	--------	5.6959	5.6907	.0052	5.6478	3B	5.6600	5.6698	5.6959	5.7026	.0067	5.7500
5¾-16 or 5.750-16	UN	2A	.0019	5.7481	5.7387	--------	5.7075	5.7013	.0062	5.6714	2B	5.682	5.696	5.7094	5.7175	.0081	5.7500
		3A	.0000	5.7500	5.7406	--------	5.7094	5.7047	.0047	5.6733	3B	5.6820	5.6908	5.7094	5.7155	.0061	5.7500
5⅞-12 or 5.875-12	UN	2A	.0021	5.8729	5.8615	--------	5.8188	5.8119	.0069	5.7707	2B	5.785	5.803	5.8209	5.8299	.0090	5.8750
		3A	.0000	5.8750	5.8636	--------	5.8209	5.8157	.0052	5.7728	3B	5.7850	5.7948	5.8209	5.8276	.0067	5.8750
5⅞-16 or 5.875-16	UN	2A	.0019	5.8731	5.8637	--------	5.8325	5.8263	.0062	5.7964	2B	5.807	5.821	5.8344	5.8425	.0081	5.8750
		3A	.0000	5.8750	5.8656	--------	5.8344	5.8297	.0047	5.7983	3B	5.8070	5.8158	5.8344	5.8405	.0061	5.8750
6-4 or 6.000-4	UN	2A	.0037	5.9963	5.9725	--------	5.8339	5.8215	.0124	5.6896	2B	5.729	5.767	5.8376	5.8537	.0161	6.0000
		3A	.0000	6.0000	5.9762	--------	5.8376	5.8283	.0093	5.6933	3B	5.7290	5.7594	5.8376	5.8496	.0120	6.0000
6-12 or 6.000-12	UN	2A	.0021	5.9979	5.9865	--------	5.9438	5.9369	.0069	5.8957	2B	5.910	5.928	5.9459	5.9549	.0090	6.0000
		3A	.0000	6.0000	5.9886	--------	5.9459	5.9407	.0052	5.8978	3B	5.9100	5.9198	5.9459	5.9526	.0067	6.0000
6-16 or 6.099-16	UN	2A	.0019	5.9981	5.9887	--------	5.9575	5.9513	.0062	5.9214	2B	5.932	5.946	5.9594	5.9675	.0081	6.0000
		3A	.0000	6.0000	5.9906	--------	5.9594	5.9547	.0047	5.9233	3B	5.9320	5.9408	5.9594	5.9655	.0061	6.0000

[a] Regarding combinations of thread classes, see par. 1, p. 18, Part I.
[b] For class 2A threads having an additive finish the maximum is increased to the basic size, the value being the same as for class 3A shown in this column. See par. 2, p. 23, Part I and par. 4, p. 16 in this Supplement.
[c] For unfinished hot-rolled material.
[d] See fig. III.1, p. 2 in this Supplement; figs. III.3 and III.4, pp. 24 and 25, Part I.
[e] Revised minor diameter limits of classes 1B and 2B are in process of ratification as Unified Standard.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
					deg	min				deg	min
1	2	3	4	5	6		7	8	9	10	
			in.	in.				in.	in		
0–80 or .060–80	UNF	2A	0.00090	0.00052	3	18	2B	0.00115	0.00066	4	13
		3A	.00065	.00038	2	23	3B	.00085	.00049	3	7
1–64 or .073–64	UNC	2A	.00100	.00058	2	56	2B	.00130	.00075	3	48
		3A	.00075	.00043	2	12	3B	.00095	.00055	2	47
1–72 or .073–72	UNF	2A	.00095	.00055	3	8	2B	.00125	.00072	4	7
		3A	.00070	.00040	2	19	3B	.00095	.00055	3	8
2–56 or .086–56	UNC	2A	.00105	.00061	2	42	2B	.00140	.00081	3	35
		3A	.00080	.00046	2	3	3B	.00105	.00061	2	42
2–64 or .086–64	UNF	2A	.00100	.00058	2	56	2B	.00135	.00078	3	57
		3A	.00075	.00043	2	12	3B	.00100	.00058	2	56
3–48 or .099–48	UNC	2A	.00115	.00066	2	32	2B	.00150	.00087	3	18
		3A	.00085	.00049	1	52	3B	.00110	.00064	2	25
3–56 or .099–56	UNF	2A	.00110	.00064	2	49	2B	.00140	.00081	3	35
		3A	00080	.00046	2	3	3B	.00105	.00061	2	42
4–40 or .112–40	UNC	2A	.00125	.00072	2	17	2B	.00165	.00095	3	1
		3A	.00095	.00055	1	44	3B	.00120	.00069	2	12
4–48 or .112–48	UNF	2A	.00120	.00069	2	38	2B	.00155	.00089	3	24
		3A	.00090	.00052	1	59	3B	.00115	.00066	2	32
5–40 or .125–40	UNC	2A	.00130	.00075	2	23	2B	.00165	.00095	3	1
		3A	.00095	.00055	1	44	3B	.00125	.00072	2	17
5–44 or .125–44	UNF	2A	.00125	.00072	2	31	2B	.00160	.00092	3	13
		3A	.00095	.00055	1	55	3B	.00120	.00069	2	25
6–32 or .138–32	UNC	2A	.00140	.00081	2	3	2B	.00185	.00107	2	43
		3A	.00105	.00061	1	32	3B	.00135	.00078	1	59
6–40 or .138–40	UNF	2A	.00130	.00075	2	23	2B	.00170	.00098	3	7
		3A	.00100	.00058	1	50	3B	.00125	.00072	2	17
8–32 or .164–32	UNC	2A	.00145	.00084	2	8	2B	.00190	.00110	2	47
		3A	.00110	.00064	1	37	3B	.00140	.00081	2	3
8–36 or .164–36	UNF	2A	.00140	.00081	2	19	2B	.00180	.00104	2	58
		3A	.00105	.00061	1	44	3B	.00135	.00078	2	14
10–24 or .190–24	UNC	2A	.00165	.00095	1	49	2B	.00215	.00124	2	22
		3A	.00125	.00072	1	22	3B	.00160	.00092	1	46
10–32 or .190–32	UNF	2A	.00150	.00087	2	12	2B	.00195	.00113	2	51
		3A	.00115	.00066	1	41	3B	.00145	.00084	2	8
12–24 or .216–24	UNC	2A	.00170	.00098	1	52	2B	.00220	.00127	2	25
		3A	.00130	.00075	1	26	3B	.00165	.00095	1	49
12–28 or .216–28	UNF	2A	.00160	.00092	2	3	2B	00210	.00121	2	42
		3A	.00120	.00069	1	32	3B	.00155	.00089	1	59
12–32 or .216–32	UNEF	2A	.00155	.00089	2	16	2B	.00205	.00118	3	0
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
¼–20 or .250–20	UNC	1A	.00280	.00162	2	34	1B	.00365	.00211	3	21
		2A	.00185	.00107	1	42	2B	.00245	.00141	2	15
		3A	.00140	.00081	1	17	3B	.00180	.00104	1	39
¼–28 or .250–28	UNF	1A	.00250	.00144	3	12	1B	.00325	.00188	4	10
		2A	.00165	.00095	2	7	2B	.00215	.00124	2	45
		3A	.00125	.00072	1	36	3B	.00160	.00092	2	3
¼–32 or .250–32	UNEF	2A	.00160	.00092	2	21	2B	.00210	.00121	3	5
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
5⁄16–18 or .3125–18	UNC	1A	.00305	.00176	2	31	1B	.00395	.00228	3	15
		2A	.00200	.00115	1	39	2B	.00265	.00153	2	11
		3A	.00150	.00087	1	14	3B	.00195	.00113	1	37
5⁄16–20 or .3125–20	UN	2A	.00200	.00115	1	50	2B	.00260	.00150	2	23
		3A	.00150	.00087	1	22	3B	.00195	.00113	1	47
5⁄16–24 or .3125–24	UNF	1A	.00275	.00159	3	1	1B	.00355	.00205	3	54
		2A	.00185	.00107	2	2	2B	.00240	.00139	2	38
		3A	.00135	.00078	1	29	3B	.00180	.00104	1	59
5⁄16–28 or .3125–28	UN	2A	.00170	.00098	2	11	2B	.00220	.00127	2	49
		3A	.00130	.00075	1	40	3B	00165	.00095	2	7
5⁄16–32 or .3125–32	UNEF	2A	.00160	.00092	2	21	2B	.00210	.00121	3	5
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
3⁄8–16 or .375–16	UNC	1A	.00325	.00188	2	23	1B	.00425	.00245	3	7
		2A	.00220	.00127	1	37	2B	.00285	.00165	2	5
		3A	.00165	.00095	1	13	3B	.00215	.00124	1	35

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
⅜–20 or .375–20	UN	2A 3A	.00205 .00155	.00118 .00089	1 1	53 25	2B 3B	.00270 .00200	.00156 .00115	2 1	28 50
⅜–24 or .375–24	UNF	1A 2A 3A	.00285 .00190 .00145	.00165 .00110 .00084	3 2 1	8 5 36	1B 2B 3B	.00370 .00245 .00185	.00214 .00141 .00107	4 2 2	4 42 2
⅜–28 or .375–28	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	19 44	2B 3B	.00230 .00175	.00133 .00101	2 2	57 15
⅜–32 or .375–32	UNEF	2A 3A	.00170 .00125	.00098 .00072	2 1	30 50	2B 3B	.00220 .00165	.00127 .00095	3 2	13 25
⁷⁄₁₆–14 or .4375–14	UNC	1A 2A 3A	.00355 .00235 .00175	.00205 .00136 .00101	2 1 1	17 30 7	1B 2B 3B	.00460 .00305 .00230	.00266 .00176 .00133	2 1 1	57 57 29
⁷⁄₁₆–16 or .4375–16	UN	2A 3A	.00230 .00170	.00133 .00098	1 1	41 15	2B 3B	.00295 .00225	.00170 .00130	2 1	10 39
⁷⁄₁₆–20 or .4375–20	UNF	1A 2A 3A	.00315 .00210 .00155	.00182 .00121 .00089	2 1 1	53 55 25	1B 2B 3B	.00405 .00270 .00205	.00234 .00156 .00118	3 2 1	42 28 53
⁷⁄₁₆–28 or .4375–28	UNEF	2A 3A	.00180 .00135	.00104 .00078	2 1	19 44	2B 3B	.00230 .00175	.00133 .00101	2 2	57 15
⁷⁄₁₆–32 or .4375–32	UN	2A 3A	.00170 .00125	.00098 .00072	2 1	30 50	2B 3B	.00220 .00165	.00127 .00095	3 2	13 25
½–13 or .500–13	UNC	1A 2A 3A	.00370 .00250 .00185	.00214 .00144 .00107	2 1 1	12 29 6	1B 2B 3B	.00485 .00325 .00240	.00280 .00188 .00139	2 1 1	53 56 26
½–16 or .500–16	UN	2A 3A	.00235 .00175	.00136 .00101	1 1	43 17	2B 3B	.00305 .00230	.00176 .00133	2 1	14 41
½–20 or .500–20	UNF	1A 2A 3A	.00320 .00215 .00160	.00185 .00124 .00092	2 1 1	56 58 28	1B 2B 3B	.00420 .00280 .00210	.00242 .00162 .00121	3 2 1	51 34 55
½–28 or .500–28	UNEF	2A 3A	.00185 .00140	.00107 .00081	2 1	22 48	2B 3B	.00240 .00180	.00139 .00104	3 2	5 19
½–32 or .500–32	UN	2A 3A	.00175 .00130	.00101 .00075	2 1	34 54	2B 3B	.00225 .00170	.00130 .00098	3 2	18 30
⁹⁄₁₆–12 or .5625–12	UNC	1A 2A 3A	.00390 .00260 .00195	.00225 .00150 .00113	2 1 1	9 26 4	1B 2B 3B	.00510 .00340 .00255	.00294 .00196 .00147	2 1 1	48 52 24
⁹⁄₁₆–16 or .5625–16	UN	2A 3A	.00235 .00175	.00136 .00101	1 1	43 17	2B 3B	.00305 .00230	.00176 .00133	2 1	14 41
⁹⁄₁₆–18 or .5625–18	UNF	1A 2A 3A	.00340 .00225 .00170	.00196 .00130 .00098	2 1 1	48 51 24	1B 2B 3B	.00445 .00295 .00220	.00257 .00170 .00127	3 2 1	40 26 49
⁹⁄₁₆–20 or .5625–20	UN	2A 3A	.00210 .00160	.00121 .00092	1 1	55 28	2B 3B	.00275 .00205	.00159 .00118	2 1	31 53
⁹⁄₁₆–24 or .5625–24	UNEF	2A 3A	.00195 .00145	.00113 .00084	2 1	9 36	2B 3B	.00255 .00190	.00147 .00110	2 2	48 5
⁹⁄₁₆–28 or .5625–28	UN	2A 3A	.00185 .00140	.00107 .00081	2 1	22 48	2B 3B	.00240 .00180	.00139 .00104	3 2	5 19
⁹⁄₁₆–32 or .5625–32	UN	2A 3A	.00175 .00130	.00101 .00075	2 1	34 54	2B 3B	.00225 .00170	.00130 .00098	3 2	18 30
⅝–11 or .625–11	UNC	1A 2A 3A	.00415 .00275 .00205	.00240 .00159 .00118	2 1 1	5 23 2	1B 2B 3B	.00535 .00360 .00270	.00309 .00208 .00156	2 1 1	42 49 22
⅝–12 or .625–12	UN	2A 3A	.00270 .00205	.00156 .00118	1 1	29 8	2B 3B	.00355 .00265	.00205 .00153	1 1	57 27
⅝–16 or .625–16	UN	2A 3A	.00240 .00180	.00139 .00104	1 1	46 19	2B 3B	.00310 .00230	.00179 .00133	2 1	16 41
⅝–18 or .625–18	UNF	1A 2A 3A	.00350 .00235 .00175	.00202 .00136 .00101	2 1 1	53 56 27	1B 2B 3B	.00455 .00300 .00225	.00263 .00173 .00130	3 2 1	45 28 51
⅝–20 or .625–20	UN	2A 3A	.00215 .00160	.00124 .00092	1 1	58 28	2B 3B	.00280 .00210	.00162 .00121	2 1	34 55
⅝–24 or .625–24	UNEF	2A 3A	.00200 .00150	.00115 .00087	2 1	12 39	2B 3B	.00260 .00195	.00150 .00113	2 2	51 9

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal			
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle
1	2	3	4	5	6		7	8	9	10
			in.	in.	deg	min		in.	in.	deg	min
5⁄8–28 or .625–28	UN	2A 3A	.00190 .00140	.00110 .00081	2 1	26 48	2B 3B	.00245 .00185	.00141 .00107	3 2	8 22
5⁄8–32 or .625–32	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	38 59	2B 3B	.00230 .00175	.00133 .00101	3 2	22 34
11⁄16–12 or .6875–12	UN	2A 3A	.00270 .00205	.00156 .00118	1 1	29 8	2B 3B	.00355 .00265	.00205 .06153	1 1	57 27
11⁄16–16 or .6875–16	UN	2A 3A	.00240 .00180	.00139 .00104	1 1	46 19	2B 3B	.00310 .00230	.00179 .00133	2 1	16 41
11⁄16–20 or .6875–20	UN	2A 3A	.00215 .00160	.00124 .00092	1 1	58 28	2B 3B	.00280 .00210	.00162 .00121	2 1	34 55
11⁄16–24 or .6875–24	UNEF	2A 3A	.00200 .00150	.00115 .00087	2 1	12 39	2B 3B	.00260 .00195	.00150 .00113	2 2	51 9
11⁄16–28 or .6875–28	UN	2A 3A	.00190 .00140	.00110 .00081	2 1	26 48	2B 3B	.00245 .00185	.00141 .00107	3 2	8 22
11⁄16–32 or .6875–32	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	38 59	2B 3B	.00230 .00175	.00133 .00101	3 2	22 34
3⁄4–10 or .750–10	UNC	1A 2A 3A	.00440 .00295 .00220	.00254 .00170 .00127	2 1 1	1 21 0	1B 2B 3B	.00575 .00385 .00285	.00332 .00222 .00165	2 1 1	38 46 18
3⁄4–12 or .750–12	UN	2A 3A	.00275 .00205	.00159 .00118	1 1	31 8	2B 3B	.00360 .00270	.00208 .00156	1 1	59 29
3⁄4–16 or .750–16	UNF	1A 2A 3A	.00375 .00250 .00190	.00217 .00144 .00110	2 1 1	45 50 24	1B 2B 3B	.00490 .00325 .00245	.00283 .00188 .00141	3 2 1	35 23 48
3⁄4–20 or .750–20	UNEF	2A 3A	.00220 .00165	.00127 .00095	2 1	1 31	2B 3B	.00285 .00215	.00165 .00124	2 1	37 58
3⁄4–28 or .750–28	UN	2A 3A	.00190 .00145	.00110 .00084	2 1	26 52	2B 3B	.00250 .00185	.00144 .00107	3 2	12 22
3⁄4–32 or .750–32	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	38 59	2B 3B	.00235 .00180	.00136 .00104	3 2	27 38
13⁄16–12 or .8125–12	UN	2A 3A	.00275 .00205	.00159 .00118	1 1	31 8	2B 3B	.00360 .00270	.00208 .00156	1 1	59 29
13⁄16–16 or .8125–16	UN	2A 3A	.00245 .00180	.00141 .00104	1 1	48 19	2B 3B	.00315 .00235	.00182 .00136	2 1	19 43
13⁄16–20 or .8125–20	UNEF	2A 3A	.00220 .00165	.00127 .00095	2 1	1 31	2B 3B	.00285 .00215	.00165 .00124	2 1	37 58
13⁄16–28 or .8125–28	UN	2A 3A	.00190 .00145	.00110 .00084	2 1	26 52	2B 3B	.00250 .00185	.00144 .00107	3 2	12 22
13⁄16–32 or .8125–32	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	38 59	2B 3B	.00235 .00180	.00136 .00104	3 2	27 38
7⁄8–9 or .875–9	UNC	1A 2A 3A	.00475 .00315 .00235	.00274 .00182 .00136	1 1 0	58 18 58	1B 2B 3B	.00615 .00410 .00305	.00355 .00237 .00176	2 1 1	32 41 15
7⁄8–12 or .875–12	UN	2A 3A	.00275 .00205	.00159 .00118	1 1	31 8	2B 3B	.00360 .00270	.00208 .00156	1 1	59 29
7⁄8–14 or .875–14	UNF	1A 2A 3A	.00405 .00270 .00205	.00234 .00156 .00118	2 1 1	36 44 19	1B 2B 3B	.00530 .00350 .00265	.00306 .00202 .00153	3 2 1	24 15 42
7⁄8–16 or .875–16	UN	2A 3A	.00245 .00180	.00141 .00104	1 1	48 19	2B 3B	.00315 .00235	.00182 .00136	2 1	19 43
7⁄8–20 or .875–20	UNEF	2A 3A	.00220 .00165	.00127 .00095	2 1	1 31	2B 3B	.00285 .00215	.00165 .00124	2 1	37 58
7⁄8–28 or .875–28	UN	2A 3A	.00190 .00145	.00110 .00084	2 1	26 52	2B 3B	.00250 .00185	.00144 .00107	3 2	12 22
7⁄8–32 or .875–32	UN	2A 3A	.00180 .00135	.00104 .00078	2 1	38 59	2B 3B	.00235 .00180	.00136 .00104	3 2	27 38
15⁄16–12 or .9375–12	UN	2A 3A	.00285 .00210	.00165 .00121	1 1	34 9	2B 3B	.00370 .00275	.00214 .00159	2 1	2 31
15⁄16–16 or .9375–16	UN	2A 3A	.00250 .00185	.00144 .00107	1 1	50 21	2B 3B	.00325 .00245	.00188 .00141	2 1	23 48
15⁄16–20 or .9375–20	UNEF	2A 3A	.00225 .00170	.00130 .00098	2 1	4 33	2B 3B	.00295 .00220	.00170 .00127	2 2	42 1

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Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
					deg	min				deg	min
1	2	3	4	5	6		7	8	9	10	
1⁵⁄₁₆–28 or .9375–28	UN	2A 3A	in. .00200 .00150	in. .00115 .00087	2 1	34 55	2B 3B	in. .00260 .00195	in. .00150 .00113	3 2	20 30
1⁵⁄₁₆–32 or .9375–32	UN	2A 3A	.00190 .00140	.00110 .00081	2 2	47 3	2B 3B	.00245 .00185	.00141 .00107	3 2	35 43
1–8 or 1.000–8	UNC	1A 2A 3A	.00505 .00340 .00255	.00292 .00196 .00147	1 1 0	51 15 56	1B 2B 3B	.00660 .00440 .00330	.00381 .00254 .00191	2 1 1	25 37 13
1–12 or 1.000–12	UNF	1A 2A 3A	.00440 .00295 .00220	.00254 .00170 .00127	2 1 1	25 37 13	1B 2B 3B	.00570 .00380 .00285	.00329 .00219 .00165	3 2 1	8 5 34
1–16 or 1.000–16	UN	2A 3A	.00250 .00185	.00144 .00107	1 1	50 21	2B 3B	.00325 .00245	.00188 .00141	2 1	23 48
1–20 or 1.000–20	UNEF	2A 3A	.00225 .00170	.00130 .00098	2 1	4 33	2B 3B	.00295 .00220	.00170 .00127	2 2	42 1
1–28 or 1.000–28	UN	2A 3A	.00200 .00150	.00115 .00087	2 1	34 55	2B 3B	.00260 .00195	.00150 .00113	3 2	20 30
1–32 or 1.000–32	UN	2A 3A	.00190 .00140	.00110 .00081	2 2	47 3	2B 3B	.00245 .00185	.00141 .00107	3 2	35 43
1¹⁄₁₆–8 or 1.0625–8	UN	2A 3A	.00340 .00255	.00196 .00147	1 0	15 56	2B 3B	.00445 .00335	.00257 .00193	1 1	38 14
1¹⁄₁₆–12 or 1.0625–12	UN	2A 3A	.00285 .00210	.00165 .00121	1 1	34 9	2B 3B	.00370 .00275	.00214 .00159	2 1	2 31
1¹⁄₁₆–16 or 1.0625–16	UN	2A 3A	.00250 .00185	.00144 .00107	1 1	50 21	2B 3B	.00325 .00245	.00188 .00141	2 1	23 48
1¹⁄₁₆–18 or 1.0625–18	UNEF	2A 3A	.00235 .00180	.00136 .00104	1 1	56 29	2B 3B	.00310 .00230	.00179 .00133	2 1	33 54
1¹⁄₁₆–20 or 1.0625–20	UN	2A 3A	.00225 .00170	.00130 .00098	2 1	4 33	2B 3B	.00295 .00220	.00170 .00127	2 2	42 1
1¹⁄₁₆–28 or 1.0625–28	UN	2A 3A	.00200 .00150	.00115 .00087	2 1	34 55	2B 3B	.00260 .00195	.00150 .00113	3 2	20 30
1⅛–7 or 1.125–7	UNC	1A 2A 3A	.00545 .00360 .00270	.00315 .00208 .00156	1 1 0	45 9 52	1B 2B 3B	.00705 .00470 .00355	.00407 .00271 .00205	2 1 1	16 30 8
1⅛–8 or 1.125–8	UN	2A 3A	.00345 .00260	.00199 .00150	1 0	16 57	2B 3B	.00450 .00335	.00260 .00193	1 1	39 14
1⅛–12 or 1.125–12	UNF	1A 2A 3A	.00450 .00300 .00225	.00260 .00173 .00130	2 1 1	28 39 14	1B 2B 3B	.00585 .00390 .00295	.00338 .00225 .00170	3 2 1	13 9 37
1⅛–16 or 1.125–16	UN	2A 3A	.00250 .00185	.00144 .00107	1 1	50 21	2B 3B	.00325 .00245	.00188 .00141	2 1	23 48
1⅛–18 or 1.125–18	UNEF	2A 3A	.00235 .00180	.00136 .00104	1 1	56 29	2B 3B	.00310 .00230	.00179 .00133	2 1	33 54
1⅛–20 or 1.125–20	UN	2A 3A	.00225 .00170	.00130 .00098	2 1	4 33	2B 3B	.00295 .00220	.00170 .00127	2 2	42 1
1⅛–28 or 1.125–28	UN	2A 3A	.00200 .00150	.00115 .00087	2 1	34 55	2B 3B	.00260 .00195	.00150 .00113	3 2	20 30
1³⁄₁₆–8 or 1.1875–8	UN	2A 3A	.00350 .00260	.00202 .00150	1 0	17 57	2B 3B	.00455 .00340	.00263 .00196	1 1	40 15
1³⁄₁₆–12 or 1.1875–12	UN	2A 3A	.00290 .00215	.00167 .00124	1 1	36 11	2B 3B	.00375 .00280	.00217 .00162	2 1	4 32
1³⁄₁₆–16 or 1.1875–16	UN	2A 3A	.00255 .00190	.00147 .00110	1 1	52 24	2B 3B	.00330 .00250	.00191 .00144	2 1	25 50
1³⁄₁₆–18 or 1.1875–18	UNEF	2A 3A	.00245 .00180	.00141 .00104	2 1	1 29	2B 3B	.00315 .00235	.00182 .00136	2 1	36 56
1³⁄₁₆–20 or 1.1875–20	UN	2A 3A	.00235 .00175	.00136 .00101	2 1	9 36	2B 3B	.00305 .00225	.00176 .00130	2 2	48 4
1³⁄₁₆–28 or 1.1875–28	UN	2A 3A	.00205 .00155	.00118 .00089	2 1	38 59	2B 3B	.00265 .00200	.00153 .00115	3 2	24 34
1¼–7 or 1.250–7	UNC	1A 2A 3A	.00555 .00370 .00275	.00320 .00214 .00159	1 1 0	47 11 53	1B 2B 3B	.00720 .00480 .00360	.00416 .00277 .00208	2 1 1	19 32 9
1¼–8 or 1.250–8	UN	2A 3A	.00350 .00265	.00202 .00153	1 0	17 58	2B 3B	.00460 .00345	.00266 .00199	1 1	41 16

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
1¼–12 or 1.250–12	UNF	1A	.00460	.00266	2	32	1B	.00600	.00346	3	18
		2A	.00310	.00179	1	42	2B	.00400	.00231	2	12
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
1¼–16 or 1.250–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1¼–18 or 1.250–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1¼–20 or 1.250–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1¼–28 or 1.250–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1⁵⁄₁₆–8 or 1.3125–8	UN	2A	.00355	.00205	1	18	2B	.00460	.00266	1	41
		3A	.00265	.00153	0	58	3B	.00345	.00199	1	16
1⁵⁄₁₆–12 or 1.3125–12	UN	2A	.00290	.00167	1	36	2B	.00375	.00217	2	4
		3A	.00215	.00124	1	11	3B	.00280	.00162	1	32
1⁵⁄₁₆–16 or 1.3125–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1⁵⁄₁₆–18 or 1.3125–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1⁵⁄₁₆–20 or 1.3125–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1⁵⁄₁₆–28 or 1.3125–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1⅜–6 or 1.375–6	UNC	1A	.00600	.00346	1	39	1B	.00775	.00447	2	8
		2A	.00400	.00231	1	6	2B	.00520	.00300	1	26
		3A	.00300	.00173	0	50	3B	.00390	.00225	1	4
1⅜–8 or 1.375–8	UN	2A	.00360	.00208	1	19	2B	.00465	.00268	1	42
		3A	.00270	.00156	0	59	3B	.00350	.00202	1	17
1⅜–12 or 1.375–12	UNF	1A	.00470	.00271	2	35	1B	.00615	.00355	3	23
		2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00305	.00176	1	41
1⅜–16 or 1.375–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1⅜–18 or 1.375–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1⅜–20 or 1.375–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1⅜–28 or 1.375–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1⁷⁄₁₆–6 or 1.4375–6	UN	2A	.00400	.00231	1	6	2B	.00520	.00300	1	26
		3A	.00300	.00173	0	50	3B	.00390	.00225	1	4
1⁷⁄₁₆–8 or 1.4375–8	UN	2A	.00360	.00208	1	19	2B	.00470	.00271	1	43
		3A	.00270	.00156	0	59	3B	.00355	.00205	1	18
1⁷⁄₁₆–12 or 1.4375–12	UN	2A	.00295	.00170	1	37	2B	.00380	.00219	2	5
		3A	.00220	.00127	1	13	3B	.00285	.00165	1	34
1⁷⁄₁₆–16 or 1.4375–16	UN	2A	.00260	.00150	1	54	2B	.00340	.00196	2	30
		3A	.00195	.00113	1	26	3B	.00255	.00147	1	52
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2A	.00250	.00144	2	4	2B	.00325	.00188	2	41
		3A	.00185	.00107	1	32	3B	.00240	.00139	1	59
1⁷⁄₁₆–20 or 1.4375–20	UN	2A	.00240	.00139	2	12	2B	.00310	.00179	2	50
		3A	.00180	.00104	1	39	3B	.00230	.00133	2	6
1⁷⁄₁₆–28 or 1.4375–28	UN	2A	.00210	.00121	2	42	2B	.00275	.00159	3	31
		3A	.00155	.00089	1	59	3B	.00205	.00118	2	38
1½–6 or 1.500–6	UNC	1A	.00605	.00349	1	40	1B	.00790	.00456	2	10
		2A	.00405	.00234	1	7	2B	.00525	.00303	1	27
		3A	.00305	.00176	0	50	3B	.00395	.00228	1	5
1½–8 or 1.500–8	UN	2A	.00365	.00211	1	20	2B	.00475	.00274	1	44
		3A	.00275	.00159	1	0	3B	.00355	.00205	1	18
1½–12 or 1.500–12	UNF	1A	.00480	.00277	2	38	1B	.00625	.00361	3	26
		2A	.00320	.00185	1	46	2B	.00415	.00240	2	17
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
1½–16 or 1.500–16	UN	2A	.00260	.00150	1	54	2B	.00340	.00196	2	30
		3A	.00195	.00113	1	26	3B	.00255	.00147	1	52

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	in.	deg	min		in.	in.	deg	min
1½–18 or 1.500–18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1½–20 or 1.500–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1½–28 or 1.500–28	UN	2A 3A	.00210 .00155	.00121 .00089	2 1	42 59	2B 3B	.00275 .00205	.00159 .00118	3 2	31 38
1⁹⁄₁₆–6 or 1.5625–6	UN	2A 3A	.00410 .00305	.00237 .00176	1 0	8 50	2B 3B	.00530 .00400	.00306 .00231	1 1	27 6
1⁹⁄₁₆–8 or 1.5625–8	UN	2A 3A	.00370 .00275	.00214 .00159	1 1	21 0	2B 3B	.00480 .00360	.00277 .00208	1 1	46 19
1⁹⁄₁₆–12 or 1.5625–12	UN	2A 3A	.00295 .00220	.00170 .00127	1 1	37 13	2B 3B	.00380 .00285	.00219 .00165	2 1	5 34
1⁹⁄₁₆–16 or 1.5625–16	UN	2A 3A	.00260 .00195	.00150 .00113	1 1	54 26	2B 3B	.00340 .00255	.00196 .00147	2 1	30 52
1⁹⁄₁₆–18 or 1.5625–18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1⁹⁄₁₆–20 or 1.5625–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1⅝–6 or 1.625–6	UN	2A 3A	.00410 .00310	.00237 .00179	1 0	8 51	2B 3B	.00535 .00400	.00309 .00231	1 1	28 6
1⅝–8 or 1.625–8	UN	2A 3A	.00370 .00280	.00214 .00162	1 1	21 2	2B 3B	.00485 .00360	.00280 .00208	1 1	47 19
1⅝–12 or 1.625–12	UN	2A 3A	.00295 .00220	.00170 .00127	1 1	37 13	2B 3B	.00380 .00285	.00219 .00165	2 1	5 34
1⅝–16 or 1.625–16	UN	2A 3A	.00260 .00195	.00150 .00113	1 1	54 26	2B 3B	.00340 .00255	.00196 .00147	2 1	30 52
1⅝–18 or 1.625–18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1⅝–20 or 1.625–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1¹¹⁄₁₆–6 or 1.6875–6	UN	2A 3A	.00415 .00310	.00240 .00179	1 0	8 51	2B 3B	.00540 .00405	.00312 .00234	1 1	29 7
1¹¹⁄₁₆–8 or 1.6875–8	UN	2A 3A	.00375 .00280	.00217 .00162	1 1	22 2	2B 3B	.00485 .00365	.00280 .00211	1 1	47 20
1¹¹⁄₁₆–12 or 1.6875–12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36
1¹¹⁄₁₆–16 or 1.6875–16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1¹¹⁄₁₆–18 or 1.6875–18	UNEF	2A 3A	.00255 .00190	.00147 .00110	2 1	6 34	2B 3B	.00330 .00245	.00191 .00141	2 2	43 1
1¹¹⁄₁₆–20 or 1.6875–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1¾–5 or 1.750–5	UNC	1A 2A 3A	.00670 .00445 .00335	.00387 .00257 .00193	1 1 0	32 1 46	1B 2B 3B	.00870 .00580 .00435	.00502 .00335 .00251	2 1 1	0 20 0
1¾–6 or 1.750–6	UN	2A 3A	.00415 .00315	.00240 .00182	1 0	8 52	2B 3B	.00540 .00405	.00312 .00234	1 1	29 7
1¾–8 or 1.750–8	UN	2A 3A	.00375 .00285	.00217 .00165	1 1	22 3	2B 3B	.00490 .00370	.00283 .00214	1 1	48 21
1¾–12 or 1.750–12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36
1¾–16 or 1.750–16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1¾–20 or 1.750–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1¹³⁄₁₆–6 or 1.8125–6	UN	2A 3A	.00420 .00315	.00242 .00182	1 0	9 52	2B 3B	.00545 .00410	.00315 .00237	1 1	30 8
1¹³⁄₁₆–8 or 1.8125–8	UN	2A 3A	.00380 .00285	.00219 .00165	1 1	24 3	2B 3B	.00495 .00370	.00286 .00214	1 1	49 21
1¹³⁄₁₆–12 or 1.8125–12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36

		External					Internal			
Nominal size and threads per inch	Series designation	Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	

			in.	in.	deg	min		in.	in.	deg	min
1 13/16–16 or 1.8125–16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1 13/16–20 or 1.8125–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1 7/8–6 or 1.875–6	UN	2A 3A	.00420 .00315	.00242 .00182	1 0	9 52	2B 3B	.00550 .00410	.00318 .00237	1 1	31 8
1 7/8–8 or 1.875–8	UN	2A 3A	.00385 .00285	.00222 .00165	1 1	25 3	2B 3B	.00500 .00375	.00289 .00217	1 1	50 22
1 7/8–12 or 1.875–12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36
1 7/8–16 or 1.875–16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1 7/8–20 or 1.875–20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1 15/16–6 or 1.9375–6	UN	2A 3A	.00425 .00320	.00245 .00185	1 0	10 53	2B 3B	.00555 .00415	.00320 .00240	1 1	32 8
1 15/16–8 or 1.9375–8	UN	2A 3A	.00385 .00290	.00222 .00167	1 1	25 4	2B 3B	.00500 .00375	.00289 .00217	1 1	50 22
1 15/16–12 or 1.9375–12	UN	2A 3A	.00305 .00225	.00176 .00130	1 1	41 14	2B 3B	.00395 .00295	.00228 .00170	2 1	10 37
1 15/16–16 or 1.9375–16	UN	2A 3A	.00270 .00200	.00156 .00115	1 1	59 28	2B 3B	.00350 .00260	.00202 .00150	2 1	34 54
1 15/16–20 or 1.9375–20	UN	2A 3A	.00245 .00185	.00141 .00107	2 1	15 42	2B 3B	.00320 .00240	.00185 .00139	2 2	56 12
2–4 1/2 or 2.000–4.5	UNC	1A 2A 3A	.00715 .00475 .00355	.00413 .00274 .00205	1 0 0	28 59 44	1B 2B 3B	.00930 .00620 .00465	.00537 .00358 .00268	1 1 0	55 17 58
2–6 or 2.000–6	UN	2A 3A	.00430 .00320	.00248 .00185	1 0	11 53	2B 3B	.00555 .00415	.00320 .00240	1 1	32 8
2–8 or 2.000–8	UN	2A 3A	.00390 .00290	.00225 .00167	1 1	26 4	2B 3B	.00505 .00380	.00292 .00219	1 1	51 24
2–12 or 2.000–12	UN	2A 3A	.00305 .00225	.00176 .00130	1 1	41 14	2B 3B	.00395 .00295	.00228 .00170	2 1	10 37
2–16 or 2.000–16	UN	2A 3A	.00270 .00200	.00156 .00115	1 1	59 28	2B 3B	.00350 .00260	.00202 .00150	2 1	34 54
2–20 or 2.000–20	UN	2A 3A	.00245 .00185	.00141 .00107	2 1	15 42	2B 3B	.00320 .00240	.00185 .00139	2 2	56 12
2 1/8–6 or 2.125–6	UN	2A 3A	.00435 .00325	.00251 .00188	1 0	12 54	2B 3B	.00565 .00420	.00326 .00242	1 1	33 9
2 1/8–8 or 2.125–8	UN	2A 3A	.00395 .00295	.00228 .00170	1 1	27 5	2B 3B	.00510 .00385	.00294 .00222	1 1	52 25
2 1/8–12 or 2.125–12	UN	2A 3A	.00305 .00225	.00176 .00130	1 1	41 14	2B 3B	.00395 .00295	.00228 .00170	2 1	10 37
2 1/8–16 or 2.125–16	UN	2A 3A	.00270 .00200	.00156 .00115	1 1	59 28	2B 3B	.00350 .00260	.00202 .00150	2 1	34 54
2 1/8–20 or 2.125–20	UN	2A 3A	.00245 .00185	.00141 .00107	2 1	15 42	2B 3B	.00320 .00240	.00185 .00139	2 2	56 12
2 1/4–4 1/2 or 2.250–4.5	UNC	1A 2A 3A	.00730 .00485 .00365	.00421 .00280 .00211	1 1 0	30 0 45	1B 2B 3B	.00950 .00630 .00475	.00548 .00364 .00274	1 1 0	58 18 59
2 1/4–6 or 2.250–6	UN	2A 3A	.00440 .00330	.00254 .00191	1 0	13 54	2B 3B	.00570 .00425	.00329 .00245	1 1	34 10
2 1/4–8 or 2.250–8	UN	2A 3A	.00400 .00300	.00231 .00173	1 1	28 6	2B 3B	.00520 .00390	.00300 .00225	1 1	54 26
2 1/4–12 or 2.250–12	UN	2A 3A	.00305 .00225	.00176 .00130	1 1	41 14	2B 3B	.00395 .00295	.00228 .00170	2 1	10 37
2 1/4–16 or 2.250–16	UN	2A 3A	.00270 .00200	.00156 .00115	1 1	59 28	2B 3B	.00350 .00260	.00202 .00150	2 1	34 54
2 1/4–20 or 2.250–20	UN	2A 3A	.00245 .00185	.00141 .00107	2 1	15 42	2B 3B	.00320 .00240	.00185 .00139	2 2	56 12

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
2⅜–6 or 2.375–6	UN	2A 3A	.00445 .00330	.00257 .00191	1 0	13 54	2B 3B	.00575 .00430	.00332 .00248	1 1	35 11
2⅜–8 or 2.375–8	UN	2A 3A	.00405 .00300	.00234 .00173	1 1	29 6	2B 3B	.00525 .00395	.00303 .00228	1 1	55 27
2⅜–12 or 2.375–12	UN	2A 3A	.00310 .00230	.00179 .00133	1 1	42 16	2B 3B	.00405 .00300	.00234 .00173	2 1	14 39
2⅜–16 or 2.375–16	UN	2A 3A	.00275 .00205	.00159 .00118	2 1	1 30	2B 3B	.00360 .00270	.00208 .00156	2 1	38 59
2⅜–20 or 2.375–20	UN	2A 3A	.00255 .00190	.00147 .00110	2 1	20 44	2B 3B	.00330 .00250	.00191 .00144	3 2	1 17
2½–4 or 2.500–4	UNC	1A 2A 3A	.00775 .00520 .00390	.00447 .00300 .00225	1 0 0	25 57 43	1B 2B 3B	.01010 .00675 .00505	.00583 .00390 .00292	1 1 0	51 14 56
2½–6 or 2.500–6	UN	2A 3A	.00450 .00335	.00260 .00193	1 0	14 55	2B 3B	.00580 .00435	.00335 .00251	1 1	36 12
2½–8 or 2.500–8	UN	2A 3A	.00410 .00305	.00237 .00176	1 1	30 7	2B 3B	.00530 .00400	.00306 .00231	1 1	57 28
2½–12 or 2.500–12	UN	2A 3A	.00310 .00230	.00179 .00133	1 1	42 16	2B 3B	.00405 .00300	.00234 .00173	2 1	14 39
2½–16 or 2.500–16	UN	2A 3A	.00275 .00205	.00159 .00118	2 1	1 30	2B 3B	.00360 .00270	.00208 .00156	2 1	38 59
2½–20 or 2.500–20	UN	2A 3A	.00255 .00190	.00147 .00110	2 1	20 44	2B 3B	.00330 .00250	.00191 .00144	3 2	1 17
2⅝–6 or 2.625–6	UN	2A 3A	.00450 .00340	.00260 .00196	1 0	14 56	2B 3B	.00590 .00440	.00341 .00254	1 1	37 13
2⅝–8 or 2.625–8	UN	2A 3A	.00410 .00310	.00237 .00179	1 1	30 8	2B 3B	.00535 .00400	.00309 .00231	1 1	58 28
2⅝–12 or 2.625–12	UN	2A 3A	.00310 .00230	.00179 .00133	1 1	42 16	2B 3B	.00405 .00300	.00234 .00173	2 1	14 39
2⅝–16 or 2.625–16	UN	2A 3A	.00275 .00205	.00159 .00118	2 1	1 30	2B 3B	.00360 .00270	.00208 .00156	2 1	38 59
2⅝–20 or 2.625–20	UN	2A 3A	.00255 .00190	.00147 .00110	2 1	20 44	2B 3B	.00330 .00250	.00191 .00144	3 2	1 17
2¾–4 or 2.750–4	UNC	1A 2A 3A	.00790 .00525 .00395	.00456 .00303 .00228	1 0 0	27 58 43	1B 2B 3B	.01030 .00685 .00515	.00595 .00395 .00297	1 1 0	53 15 57
2¾–6 or 2.750–6	UN	2A 3A	.00455 .00340	.00263 .00196	1 0	15 56	2B 3B	.00595 .00445	.00344 .00257	1 1	38 13
2¾–8 or 2.750–8	UN	2A 3A	.00415 .00315	.00240 .00182	1 1	31 9	2B 3B	.00540 .00405	.00312 .00234	1 1	59 29
2¾–12 or 2.750–12	UN	2A 3A	.00310 .00230	.00179 .00133	1 1	42 16	2B 3B	.00405 .00300	.00234 .00173	2 1	14 39
2¾–16 or 2.750–16	UN	2A 3A	.00275 .00205	.00159 .00118	2 1	1 30	2B 3B	.00360 .00270	.00208 .00156	2 1	38 59
2¾–20 or 2.750–20	UN	2A 3A	.00255 .00190	.00147 .00110	2 1	20 44	2B 3B	.00330 .00250	.00191 .00144	3 2	1 17
2⅞–6 or 2.875–6	UN	2A 3A	.00460 .00345	.00266 .00199	1 0	16 57	2B 3B	.00600 .00450	.00346 .00260	1 1	39 14
2⅞–8 or 2.875–8	UN	2A 3A	.00420 .00315	.00242 .00182	1 1	32 9	2B 3B	.00550 .00410	.00318 .00237	2 1	1 30
2⅞–12 or 2.875–12	UN	2A 3A	.00315 .00235	.00182 .00136	1 1	44 18	2B 3B	.00410 .00310	.00237 .00179	2 1	15 42
2⅞–16 or 2.875–16	UN	2A 3A	.00280 .00210	.00162 .00121	2 1	3 32	2B 3B	.00365 .00275	.00211 .00159	2 2	40 1
2⅞–20 or 2.875–20	UN	2A 3A	.00260 .00195	.00150 .00113	2 1	23 47	2B 3B	.00340 .00255	.00196 .00147	3 2	7 20
3–4 or 3.000–4	UNC	1A 2A 3A	.00805 .00535 .00400	.00465 .00309 .00231	1 0 0	29 59 44	1B 2B 3B	.01045 .00695 .00520	.00603 .00401 .00300	1 1 0	55 16 57
3–6 or 3.000–6	UN	2A 3A	.00465 .00350	.00268 .00202	1 0	17 58	2B 3B	.00605 .00455	.00349 .00263	1 1	40 15

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
3–8 or 3.000–8	UN	2A	.00425	.00245	1	33	2B	.00555	.00320	2	2
		3A	.00320	.00185	1	10	3B	.00415	.00240	1	31
3–12 or 3.000–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3–16 or 3.000–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3–20 or 3.000–20	UN	2A	.00260	.00150	2	23	2B	.00340	.00196	3	7
		3A	.00195	.00113	1	47	3B	.00255	.00147	2	20
3⅛–6 or 3.125–6	UN	2A	.00470	.00271	1	18	2B	.00610	.00352	1	41
		3A	.00350	.00202	0	58	3B	.00460	.00266	1	16
3⅛–8 or 3.125–8	UN	2A	.00430	.00248	1	35	2B	.00560	.00323	2	3
		3A	.00320	.00185	1	10	3B	.00420	.00242	1	32
3⅛–12 or 3.125–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3⅛–16 or 3.125–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3¼–4 or 3.250–4	UNC	1A	.00815	.00471	1	30	1B	.01060	.00612	1	57
		2A	.00545	.00315	1	0	2B	.00705	.00407	1	18
		3A	.00410	.00237	0	45	3B	.00530	.00306	0	58
3¼–6 or 3.250–6	UN	2A	.00475	.00274	1	18	2B	.00615	.00355	1	41
		3A	.00355	.00205	0	59	3B	.00460	.00266	1	16
3¼–8 or 3.250–8	UN	2A	.00435	.00251	1	36	2B	.00565	.00326	2	4
		3A	.00325	.00188	1	11	3B	.00425	.00245	1	33
3¼–12 or 3.250–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3¼–16 or 3.250–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3⅜–6 or 3.375–6	UN	2A	.00475	.00274	1	18	2B	.00620	.00358	1	42
		3A	.00360	.00208	0	59	3B	.00465	.00268	1	17
3⅜–8 or 3.375–8	UN	2A	.00440	.00254	1	37	2B	.00570	.00329	2	5
		3A	.00330	.00191	1	13	3B	.00425	.00245	1	33
3⅜–12 or 3.375–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00242	.00139	1	19	3B	.00315	.00182	1	44
3⅜–16 or 3.375–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3½–4 or 3.500–4	UNC	1A	.00830	.00479	1	31	1B	.01075	.00621	1	58
		2A	.00550	.00318	1	0	2B	.00715	.00413	1	19
		3A	.00415	.00240	0	46	3B	.00540	.00312	0	59
3½–6 or 3.500–6	UN	2A	.00480	.00277	1	19	2B	.00625	.00361	1	43
		3A	.00360	.00208	0	59	3B	.00470	.00271	1	18
3½–8 or 3.500–8	UN	2A	.00440	.00254	1	37	2B	.00575	.00332	2	6
		3A	.00330	.00191	1	13	3B	.00430	.00248	1	35
3½–12 or 3.500–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
3½–16 or 3.500–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3⅝–6 or 3.625–6	UN	2A	.00485	.00280	1	20	2B	.00630	.00364	1	44
		3A	.00365	.00211	1	0	3B	.00475	.00274	1	18
3⅝–8 or 3.625–8	UN	2A	.00445	.00257	1	38	2B	.00580	.00335	2	8
		3A	.00335	.00193	1	14	3B	.00435	.00251	1	36
3⅝–12 or 3.625–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
3⅝–16 or 3.625–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3¾–4 or 3.750–4	UNC	1A	.00840	.00485	1	32	1B	.01090	.00629	2	0
		2A	.00560	.00323	1	2	2B	.00725	.00419	1	20
		3A	.00420	.00242	0	46	3B	.00545	.00315	1	0
3¾–6 or 3.750–6	UN	2A	.00490	.00283	1	21	2B	.00635	.00367	1	45
		3A	.00365	.00211	1	0	3B	.00475	.00274	1	18
3¾–8 or 3.750–8	UN	2A	.00450	.00260	1	39	2B	.00585	.00338	2	9
		3A	.00335	.00193	1	14	3B	.00440	.00254	1	37

TABLE III.11.

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal			
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle
1	2	3	4	5	6		7	8	9	10
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg* *min*
3¾-12 or 3.750-12	UN	2A 3A	.00320 .00240	.00185 .00139	1 1	46 19	2B 3B	.00420 .00315	.00242 .00182	2 19 / 1 44
3¾-16 or 3.750-16	UN	2A 3A	.00290 .00215	.00167 .00124	2 1	8 35	2B 3B	.00375 .00280	.00217 .00162	2 45 / 2 3
3⅞-6 or 3.875-6	UN	2A 3A	.00495 .00370	.00286 .00214	1 1	22 1	2B 3B	.00640 .00480	.00369 .00277	1 46 / 1 19
3⅞-8 or 3.875-8	UN	2A 3A	.00455 .00340	.00263 .00196	1 1	40 15	2B 3B	.00590 .00440	.00341 .00254	2 10 / 1 37
3⅞-12 or 3.875-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
3⅞-16 or 3.875-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4-4 or 4.000-4	UNC	1A 2A 3A	.00850 .00565 .00425	.00491 .00326 .00245	1 1 0	33 2 47	1B 2B 3B	.01105 .00735 .00555	.00638 .00424 .00320	2 2 / 1 21 / 1 1
4-6 or 4.000-6	UN	2A 3A	.00495 .00370	.00286 .00214	1 1	22 1	2B 3B	.00645 .00485	.00372 .00280	1 46 / 1 20
4-8 or 4.000-8	UN	2A 3A	.00455 .00340	.00263 .00196	1 1	40 15	2B 3B	.00595 .00445	.00344 .00257	2 11 / 1 38
4-12 or 4.000-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
4-16 or 4.000-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4⅛-6 or 4.125-6	UN	2A 3A	.00500 .00375	.00289 .00217	1 1	22 2	2B 3B	.00650 .00485	.00375 .00280	1 47 / 1 20
4⅛-12 or 4.125-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
4⅛-16 or 4.125-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4¼-4 or 4.250-4	UN	2A 3A	.00575 .00430	.00332 .00248	1 0	3 47	2B 3B	.00745 .00560	.00430 .00323	1 22 / 1 2
4¼-6 or 4.250-6	UN	2A 3A	.00505 .00375	.00292 .00217	1 1	23 2	2B 3B	.00655 .00490	.00378 .00283	1 48 / 1 21
4¼-12 or 4.250-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
4¼-16 or 4.250-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4⅜-6 or 4.375-6	UN	2A 3A	.00505 .00380	.00292 .00219	1 1	23 3	2B 3B	.00660 .00495	.00381 .00286	1 49 / 1 22
4⅜-12 or 4.375-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
4⅜-16 or 4.375-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4½-4 or 4.500-4	UN	2A 3A	.00580 .00435	.00335 .00251	1 0	4 48	2B 3B	.00755 .00565	.00436 .00326	1 23 / 1 2
4½-6 or 4.500-6	UN	2A 3A	.00510 .00385	.00294 .00222	1 1	24 4	2B 3B	.00665 .00495	.00384 .00286	1 50 / 1 22
4½-12 or 4.500-12	UN	2A 3A	.00325 .00245	.00188 .00141	1 1	47 21	2B 3B	.00425 .00320	.00245 .00185	2 20 / 1 46
4½-16 or 4.500-16	UN	2A 3A	.00295 .00220	.00170 .00127	2 1	10 37	2B 3B	.00380 .00285	.00219 .00165	2 47 / 2 5
4⅝-6 or 4.636-6	UN	2A 3A	.00515 .00385	.00297 .00222	1 1	25 4	2B 3B	.00665 .00500	.00384 .00289	1 50 / 1 22
4⅝-12 or 4.625-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 23 / 1 49
4⅝-16 or 4.625-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 54 / 2 10
4¾-4 or 4.750-4	UN	2A 3A	.00585 .00440	.00338 .00254	1 0	4 48	2B 3B	.00765 .00570	.00442 .00329	1 24 / 1 3
4¾-6 or 4.750-6	UN	2A 3A	.00515 .00385	.00297 .00222	1 1	25 4	2B 3B	.00670 .00505	.00387 .00292	1 51 / 1 23

Nominal size and threads per inch	Series designation	External					Internal			
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
4¾–12 or 4.750-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
4¾–16 or 4.750-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 29	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
4⅞–6 or 4.875-6	UN	2A 3A	.00520 .00390	.00300 .00225	1 1	26 4	2B 3B	.00675 .00505	.00390 .00292	1 1	51 23
4⅞–12 or 4.875-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00101	1 1	23 49
4⅞–16 or 4.875-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 ·2	54 10
5–4 or 5.000-4	UN	2A 3A	.00595 .00445	.00344 .00257	1 0	5 49	2B 3B	.00770 .00580	.00445 .00335	1 1	25 4
5–6 or 5.000-6	UN	2A 3A	.00525 .00390	.00303 .00225	1 1	27 4	2B 3B	.00680 .00510	.00393 .00294	1 1	52 24
5–12 or 5.000-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5–16 or 5.000-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅛–12 or 5.125-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5⅛–16 or 5.125-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5¼–4 or 5.250-4	UN	2A 3A	.00600 .00450	.00346 .00260	1 0	6 50	2B 3B	.00780 .00585	.00450 .00338	1 1	26 4
5¼–12 or 5.250-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5¼–16 or 5.250-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅜–12 or 5.375-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5⅜–16 or 5.375-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5½–4 or 5.500-4	UN	2A 3A	.00605 .00455	.00349 .00263	1 0	7 50	2B 3B	.00790 .00590	.00456 .00341	1 1	27 5
5½–12 or 5.500-12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5½–16 or 5.500-16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅝–12 or 5.625-12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5⅝–16 or 5.625-16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
5¾–4 or 5.750-4	UN	2A 3A	.00610 .00460	.00352 .00266	1 0	7 51	2B 3B	.00795 .00595	.00459 .00344	1 1	27 5
5¾–12 or 5.750-12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5¾–16 or 5.750-16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
5⅞–12 or 5.875-12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5⅞–16 or 5.875-16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
6–4 or 6.000-4	UN	2A 3A	.00620 .00465	.00358 .00268	1 0	8 51	2B 3B	.00805 .00600	.00465 .00346	1 1	29 6
6–12 or 6.000-12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
6–16 or 6.000-16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14

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TABLE III.12.—*Gages for standard thread series, Unified screw threads*

Nominal size and threads per inch	Series designation	Class	X ring GO Pitch diameter	X ring GO Minor diameter	NOT GO Pitch diam. Plus tol. gage	NOT GO Pitch diam. Minus tol. gage	NOT GO Minor diameter	Z major GO	Z major NOT GO Semi-finished	Z major NOT GO Un-finished hot-rolled material	X plug GO Major diameter	X plug GO Pitch diameter	HI Major diameter	HI Pitch diam. Minus tol. gage	HI Pitch diam. Plus tol. gage	Z minor GO	Z minor NOT GO	Class	Series designation	Nominal size and threads per inch
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
0-80 or .060-80	UNF	2A	0.0514	0.0460	0.0496	0.0496	0.0469	0.0595	0.0563	------	0.0600	0.0519	0.0596	0.0542	0.0542	0.0465	0.0514	2B	UNF	0-80 or .060-80
			.0512	.0457	.0498	.0494	.0472	.0594	.0564	------	.0603	.0521	.0593	.0540	.0544	.0466	.0513			
		3A	.0519	.0465	.0506	.0506	.0479	.0600	.0568	------	.0600	.0519	.0590	.0536	.0536	.0465	.0514	3B		
			.0517	.0462	.0508	.0504	.0482	.0599	.0569	------	.0603	.0521	.0587	.0534	.0538	.0466	.0513			
1-64 or .073-64	UNC	2A	.0623	.0555	.0603	.0603	.0569	.0724	.0686	------	.0730	.0629	.0723	.0655	.0655	.0561	.0623	2B	UNC	1-64 or .073-64
			.0621	.0551	.0605	.0601	.0573	.0723	.0687	------	.0734	.0631	.0719	.0653	.0657	.0562	.0622			
		3A	.0629	.0561	.0614	.0614	.0580	.0730	.0692	------	.0730	.0629	.0716	.0648	.0648	.0561	.0623	3B		
			.0627	.0557	.0616	.0612	.0584	.0729	.0693	------	.0734	.0631	.0712	.0646	.0650	.0562	.0622			
1-72 or .073-72	UNF	2A	.0634	.0574	.0615	.0615	.0585	.0724	.0689	------	.0730	.0640	.0725	.0665	.0665	.0580	.0635	2B	UNF	1-72 or .073-72
			.0632	.0571	.0617	.0613	.0588	.0723	.0690	------	.0733	.0642	.0722	.0663	.0667	.0581	.0634			
		3A	.0640	.0580	.0626	.0626	.0596	.0730	.0695	------	.0730	.0640	.0719	.0659	.0659	.0580	.0635	3B		
			.0638	.0577	.0628	.0624	.0599	.0729	.0696	------	.0733	.0642	.0716	.0657	.0661	.0581	.0634			
2-56 or .086-56	UNC	2A	.0738	.0661	.0717	.0717	.0678	.0854	.0813	------	.0860	.0744	.0849	.0772	.0772	.0667	.0737	2B	UNC	2-56 or .086-56
			.0736	.0657	.0719	.0715	.0682	.0853	.0814	------	.0864	.0746	.0845	.0770	.0774	.0668	.0736			
		3A	.0744	.0667	.0728	.0728	.0690	.0860	.0819	------	.0860	.0744	.0842	.0765	.0765	.0667	.0737	3B		
			.0742	.0663	.0730	.0726	.0693	.0859	.0820	------	.0864	.0746	.0838	.0763	.0767	.0668	.0736			
2-64 or .086-64	UNF	2A	.0753	.0685	.0733	.0733	.0699	.0854	.0816	------	.0860	.0759	.0854	.0786	.0786	.0691	.0753	2B	UNF	2-64 or .086-64
			.0751	.0681	.0735	.0731	.0703	.0853	.0817	------	.0864	.0761	.0850	.0784	.0788	.0692	.0752			
		3A	.0759	.0691	.0744	.0744	.0710	.0860	.0822	------	.0860	.0759	.0847	.0779	.0779	.0691	.0753	3B		
			.0757	.0687	.0746	.0742	.0714	.0859	.0823	------	.0864	.0761	.0843	.0777	.0781	.0692	.0752			
3-48 or .099-48	UNC	2A	.0848	.0758	.0825	.0825	.0780	.0983	.0938	------	.0990	.0855	.0975	.0885	.0885	.0764	.0845	2B	UNC	3-48 or .099-48
			.0846	.0754	.0827	.0823	.0784	.0982	.0939	------	.0994	.0857	.0971	.0883	.0887	.0765	.0844			
		3A	.0855	.0765	.0838	.0838	.0793	.0990	.0945	------	.0990	.0855	.0967	.0877	.0877	.0764	.0845	3B		
			.0853	.0761	.0840	.0836	.0797	.0989	.0946	------	.0994	.0857	.0963	.0875	.0879	.0765	.0844			
3-56 or .099-56	UNF	2A	.0867	.0790	.0845	.0845	.0806	.0983	.0942	------	.0990	.0874	.0979	.0902	.0902	.0797	.0865	2B	UNF	3-56 or .099-56
			.0865	.0786	.0847	.0843	.0810	.0982	.0943	------	.0994	.0876	.0975	.0900	.0904	.0798	.0864			
		3A	.0874	.0797	.0858	.0858	.0819	.0990	.0949	------	.0990	.0874	.0972	.0895	.0895	.0797	.0865	3B		
			.0872	.0793	.0860	.0856	.0823	.0989	.0950	------	.0994	.0876	.0968	.0893	.0897	.0798	.0864			
4-40 or .112-40	UNC	2A	.0950	.0842	.0925	.0925	.0871	.1112	.1061	------	.1120	.0958	.1099	.0991	.0991	.0849	.0939	2B	UNC	4-40 or .112-40
			.0948	.0838	.0927	.0923	.0875	.1111	.1062	------	.1124	.0960	.1095	.0989	.0993	.0850	.0938			
		3A	.0958	.0850	.0939	.0939	.0885	.1120	.1069	------	.1120	.0958	.1090	.0982	.0982	.0849	.0939	3B		
			.0956	.0846	.0941	.0937	.0889	.1119	.1070	------	.1124	.0960	.1086	.0980	.0984	.0850	.0938			
4-48 or .112-48	UNF	2A	.0978	.0888	.0954	.0954	.0909	.1113	.1068	------	.1120	.0985	.1106	.1016	.1016	.0894	.0968	2B	UNF	4-48 or .112-48
			.0976	.0884	.0956	.0952	.0913	.1112	.1069	------	.1124	.0987	.1102	.1014	.1018	.0895	.0967			
		3A	.0985	.0895	.0967	.0967	.0922	.1120	.1075	------	.1120	.0985	.1098	.1008	.1008	.0894	.0968	3B		
			.0983	.0891	.0969	.0965	.0926	.1119	.1076	------	.1124	.0987	.1094	.1006	.1010	.0895	.0967			
5-40 or .125-40	UNC	2A	.1080	.0972	.1054	.1054	.1000	.1242	.1191	------	.1250	.1088	.1229	.1121	.1121	.0979	.1061	2B	UNC	5-40 or .125-40
			.1078	.0968	.1056	.1052	.1004	.1241	.1192	------	.1254	.1090	.1225	.1119	.1123	.0980	.1062			
		3A	.1088	.0980	.1069	.1069	.1015	.1250	.1199	------	.1250	.1088	.1221	.1113	.1113	.0979	.1061	3B		
			.1086	.0976	.1071	.1067	.1019	.1249	.1200	------	.1254	.1090	.1217	.1111	.1115	.0980	.1061			

5-44 or .125-44 UNF (2B,3B)	6-32 or .138-32 UNC (2B,3B)	6-40 or .138-40 UNF (2B,3B)	8-32 or .164-32 UNC (2B,3B)	8-36 or .164-36 UNF (2B,3B)	10-24 or .190-24 UNC (2B,3B)	10-32 or .190-32 UNF (2B,3B)	12-24 or .216-24 UNC (2B,3B)	12-28 or .216-28 UNF (2B,3B)	12-32 or .216-32 UNEF (2B,3B)	1/4-20 or .250-20 UNC (1B,2B,3B)	1/4-28 or .250-28 UNF (1B,2B,3B)	1/4-32 or .250-32 UNEF (2B,3B)	5/16-18 or .3125-18 UNC (1B,2B,3B)
.1079 .1078 .1079 .1078	.1140 .1139 .1140 .1139	.1190 .1189 .1186 .1185	.1390 .1389 .1389 .1388	.1420 .1419 .1416 .1415	.1560 .1559 .1555 .1554	.1640 .1639 .1641 .1640	.1810 .1809 .1807 .1806	.1860 .1859 .1857 .1856	.1900 .1899 .1895 .1894	.2070 .2069 .2070 .2069 .2067 .2066	.2200 .2199 .2200 .2199 .2190 .2189	.2240 .2239 .2229 .2228	.2650 .2649 .2650 .2649 .2630 .2629
.1004 .1005 .1004 .1005	.1040 .1041 .1040 .1041	.1110 .1111 .1110 .1111	.1300 .1301 .1300 .1301	.1340 .1341 .1340 .1341	.1560 .1561 .1560 .1561	.1710 .1711 .1710 .1711	.1770 .1771 .1770 .1771	.1820 .1821 .1820 .1821	.1960 .1961 .1960 .1961	.2110 .2111 .2110 .2110 .2110 .2111	.2160 .2161 .2160 .2161 .2160 .2161	.2520 .2521 .2520 .2521	.2520 .2521 .2520 .2521 .2520 .2521
.1134 .1136 .1126 .1128	.1214 .1217 .1204 .1207	.1252 .1254 .1243 .1245	.1475 .1478 .1465 .1468	.1496 .1498 .1487 .1489	.1672 .1675 .1661 .1664	.1736 .1739 .1726 .1729	.1933 .1936 .1922 .1925	.1970 .1973 .1959 .1962	.1998 .2001 .1988 .1991	.2248 .2251 .2224 .2227 .2211 .2214	.2333 .2336 .2311 .2314 .2300 .2303	.2339 .2342 .2328 .2331	.2843 .2846 .2817 .2820 .2803 .2806
.1134 .1132 .1126 .1124	.1214 .1211 .1204 .1201	.1252 .1250 .1243 .1241	.1475 .1472 .1465 .1462	.1496 .1494 .1487 .1485	.1672 .1669 .1661 .1658	.1736 .1733 .1726 .1723	.1933 .1930 .1922 .1919	.1970 .1967 .1959 .1956	.1998 .1995 .1988 .1985	.2248 .2245 .2224 .2221 .2211 .2208	.2333 .2330 .2311 .2308 .2300 .2297	.2339 .2336 .2328 .2325	.2843 .2840 .2817 .2814 .2803 .2800
.1232 .1228 .1224 .1220	.1349 .1344 .1339 .1334	.1360 .1356 .1351 .1347	.1610 .1605 .1600 .1595	.1616 .1612 .1607 .1603	.1852 .1847 .1841 .1836	.1871 .1866 .1861 .1856	.2113 .2108 .2102 .2097	.2125 .2120 .2114 .2109	.2133 .2128 .2123 .2118	.2465 .2460 .2441 .2436 .2428 .2423	.2488 .2483 .2466 .2461 .2455 .2450	.2474 .2469 .2463 .2458	.3084 .3079 .3058 .3053 .3044 .3039
.1102 .1104 .1102 .1104	.1177 .1180 .1177 .1180	.1218 .1220 .1218 .1220	.1437 .1440 .1437 .1440	.1460 .1462 .1460 .1462	.1629 .1632 .1629 .1632	.1697 .1700 .1697 .1700	.1889 .1892 .1889 .1892	.1928 .1931 .1928 .1931	.1957 .1960 .1957 .1960	.2175 .2178 .2175 .2175 .2175 .2178	.2268 .2271 .2268 .2271 .2268 .2271	.2297 .2300 .2297 .2300	.2764 .2767 .2764 .2767 .2764 .2767
.1250 .1254 .1250 .1254	.1380 .1385 .1380 .1385	.1380 .1384 .1380 .1384	.1640 .1645 .1640 .1645	.1640 .1644 .1640 .1644	.1900 .1905 .1900 .1905	.1900 .1905 .1900 .1905	.2160 .2165 .2160 .2165	.2160 .2165 .2160 .2165	.2160 .2165 .2160 .2165	.2500 .2505 .2500 .2505 .2500 .2505	.2500 .2505 .2500 .2505 .2500 .2505	.2500 .2505 .2500 .2505	.3125 .3130 .3125 .3130 .3125 .3130
—	—	—	—	—	—	—	—	—	0.2367 .2368	—	—	—	.2082 .2983
.1195 .1196 .1202 .1203	.1312 .1313 .1320 .1321	.1321 .1322 .1329 .1330	.1571 .1572 .1580 .1581	.1577 .1578 .1585 .1586	.1818 .1819 .1828 .1829	.1831 .1832 .1840 .1841	.2078 .2079 .2088 .2089	.2085 .2086 .2095 .2096	.2091 .2092 .2100 .2101	.2367 .2368 .2408 .2409 .2419 .2420	.2392 .2393 .2425 .2426 .2435 .2436	.2430 .2431 .2440 .2441	.2982 .2983 .3026 .3027 .3038 .3039
.1243 .1242 .1250 .1249	.1372 .1371 .1380 .1379	.1372 .1371 .1380 .1379	.1631 .1630 .1640 .1639	.1632 .1631 .1640 .1639	.1890 .1889 .1900 .1899	.1891 .1890 .1900 .1899	.2150 .2149 .2160 .2159	.2150 .2149 .2160 .2159	.2151 .2150 .2160 .2159	.2489 .2488 .2489 .2488 .2500 .2499	.2490 .2489 .2490 .2489 .2500 .2499	.2490 .2489 .2500 .2499	.3113 .3112 .3113 .3112 .3125 .3124
.1021 .1025 .1034 .1038	.1073 .1078 .1088 .1093	.1130 .1134 .1144 .1148	.1331 .1336 .1347 .1352	.1364 .1368 .1379 .1383	.1496 .1501 .1514 .1519	.1590 .1595 .1606 .1611	.1755 .1760 .1773 .1778	.1809 .1814 .1827 .1832	.1849 .1854 .1865 .1870	.2000 .2005 .2019 .2024 .2039 .2044	.2131 .2136 .2148 .2153 .2166 .2171	.2187 .2192 .2205 .2210	.2571 .2576 .2592 .2597 .2614 .2619
.1070 .1068 .1083 .1081	.1141 .1138 .1156 .1153	.1184 .1182 .1198 .1196	.1399 .1396 .1415 .1412	.1424 .1422 .1439 .1437	.1586 .1583 .1604 .1601	.1658 .1655 .1674 .1671	.1845 .1842 .1863 .1860	.1886 .1883 .1904 .1901	.1917 .1914 .1933 .1930	.2108 .2105 .2127 .2124 .2147 .2144	.2208 .2205 .2225 .2222 .2243 .2240	.2255 .2252 .2273 .2270	.2691 .2688 .2712 .2709 .2734 .2731
.1070 .1072 .1083 .1085	.1141 .1144 .1156 .1159	.1184 .1186 .1198 .1200	.1399 .1402 .1415 .1418	.1424 .1426 .1439 .1441	.1586 .1589 .1604 .1607	.1658 .1661 .1674 .1677	.1845 .1848 .1863 .1866	.1886 .1889 .1904 .1907	.1917 .1920 .1933 .1936	.2108 .2111 .2127 .2130 .2147 .2150	.2208 .2211 .2225 .2228 .2243 .2246	.2255 .2258 .2273 .2276	.2691 .2694 .2715 .2734 .2737
.0997 .0993 .1004 .1000	.1034 .1029 .1042 .1037	.1102 .1098 .1110 .1106	.1293 .1288 .1302 .1297	.1332 .1328 .1340 .1336	.1439 .1434 .1449 .1444	.1553 .1548 .1562 .1557	.1699 .1694 .1709 .1704	.1763 .1758 .1773 .1768	.1813 .1808 .1822 .1817	.1947 .1942 .1947 .1942 .1958 .1953	.2103 .2098 .2103 .2098 .2113 .2108	.2152 .2147 .2162 .2157	.2511 .2506 .2511 .2506 .2523 .2518
.1095 .1093 .1102 .1100	.1169 .1166 .1177 .1174	.1210 .1208 .1218 .1216	.1428 .1425 .1437 .1434	.1452 .1450 .1460 .1458	.1619 .1616 .1629 .1626	.1688 .1685 .1697 .1694	.1879 .1876 .1889 .1886	.1918 .1915 .1928 .1925	.1948 .1945 .1957 .1954	.2164 .2161 .2164 .2161 .2175 .2172	.2258 .2255 .2258 .2255 .2268 .2265	.2287 .2284 .2297 .2294	.2752 .2749 .2752 .2749 .2764 .2761

Bottom class designations (external threads):
| 5-44 or .125-44 UNF (2A,3A) | 6-32 or .138-32 UNC (2A,3A) | 6-40 or .138-40 UNF (2A,3A) | 8-32 or .164-32 UNC (2A,3A) | 8-36 or .164-36 UNF (2A,3A) | 10-24 or .190-24 UNC (2A,3A) | 10-32 or .190-32 UNF (2A,3A) | 12-24 or .216-24 UNC (2A,3A) | 12-28 or .216-28 UNEF (2A,3A) | 12-32 or .216-32 UNC (2A,3A) | 1/4-20 or .250-20 UNF (1A,2A,3A) | 1/4-28 or .250-28 UNEF (1A,2A,3A) | 1/4-32 or .250-32 UNC (2A,3A) | 5/16-18 or .3125-18 UNC (1A,2A,3A) |

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

| | | | Gages for external threads | | | | | | | | Gages for internal threads | | | | | | | | | |
Nominal size and threads per inch	Series designation	Class	X thread ring gages GO Pitch diam.	X thread ring gages GO Minor diam.	LO classes 1A & 2A NOT GO class 3A — Pitch diam. Plus tolerance gage	LO classes 1A & 2A NOT GO class 3A — Pitch diam. Minus tolerance gage	LO — Minor diam.	Z plain ring gages GO	Z plain ring gages NOT GO Semi-finished	Z plain ring gages NOT GO Unfinished hot-rolled material	X thread plug gages GO Major diam.	X thread plug gages GO Pitch diam.	HI Major diam.	HI Pitch diam. Minus tolerance gage	HI Pitch diam. Plus tolerance gage	Z plain plug gages GO (minor diam.)	Z plain plug gages NOT GO (minor diam.)	Class	Series designation	Nominal size and threads per inch
(1)	(2)	(3)	(4) in.	(5) in.	(6) in.	(7) in.	(8) in.	(9) in.	(10) in.	(11) in.	(12) in.	(13) in.	(14) in.	(15) in.	(16) in.	(17) in.	(18) in.	(19)	(20)	(21)
5/16–20 or .3125–20	UN	2A	.2788	.2571	.2748	.2748	.2640	.3113	.3032	---	.3125	.2800	.3069	.2852	.2852	.2580	.2700	2B	UN	5/16–20 or .3125–20
		2A	.2785	.2566	.2751	.2745	.2645	.3112	.3033	---	.3130	.2803	.3064	.2849	.2855	.2581	.2699	2B		
		3A	.2800	.2583	.2770	.2770	.2662	.3125	.3044	---	.3125	.2800	.3056	.2839	.2839	.2580	.2680	3B		
		3A	.2797	.2578	.2773	.2767	.2667	.3124	.3045	---	.3130	.2803	.3051	.2836	.2842	.2581	.2679	3B		
5/16–24 or .3125–24	UNF	1A	.2843	.2663	.2788	.2788	.2698	.3114	.3006	---	.3125	.2854	.3105	.2925	.2925	.2670	.2770	1B	UNF	5/16–24 or .3125–24
		1A	.2840	.2658	.2791	.2785	.2703	.3113	.3007	---	.3130	.2857	.3100	.2922	.2928	.2671	.2769	1B		
		2A	.2843	.2663	.2806	.2806	.2716	.3114	.3042	---	.3125	.2854	.3082	.2902	.2902	.2670	.2770	2B		
		2A	.2840	.2658	.2809	.2803	.2721	.3113	.3043	---	.3130	.2857	.3077	.2899	.2905	.2671	.2769	2B		
		3A	.2854	.2674	.2827	.2827	.2737	.3125	.3053	---	.3125	.2854	.3070	.2890	.2890	.2670	.2754	3B		
		3A	.2851	.2669	.2830	.2824	.2742	.3124	.3054	---	.3130	.2857	.3065	.2887	.2893	.2671	.2753	3B		
5/16–28 or .3125–28	UN	2A	.2883	.2728	.2849	.2849	.2772	.3115	.3050	---	.3125	.2893	.3092	.2937	.2937	.2740	.2820	2B	UN	5/16–28 or .3125–28
		2A	.2880	.2723	.2852	.2846	.2777	.3114	.3051	---	.3130	.2896	.3087	.2934	.2940	.2741	.2819	2B		
		3A	.2893	.2738	.2867	.2867	.2790	.3125	.3060	---	.3125	.2893	.3081	.2926	.2926	.2740	.2807	3B		
		3A	.2890	.2733	.2870	.2864	.2795	.3124	.3061	---	.3130	.2896	.3076	.2923	.2929	.2741	.2806	3B		
5/16–32 or .3125–32	UNEF	2A	.2912	.2777	.2880	.2880	.2812	.3115	.3055	---	.3125	.2922	.3099	.2964	.2964	.2790	.2860	2B	UNEF	5/16–32 or .3125–32
		2A	.2909	.2772	.2883	.2877	.2817	.3114	.3056	---	.3130	.2925	.3094	.2961	.2967	.2791	.2859	2B		
		3A	.2922	.2787	.2898	.2898	.2830	.3125	.3065	---	.3125	.2922	.3088	.2953	.2953	.2790	.2847	3B		
		3A	.2919	.2782	.2901	.2895	.2835	.3124	.3066	---	.3130	.2925	.3083	.2950	.2956	.2791	.2846	3B		
3/8–16 or .375–16	UNC	1A	.3331	.3060	.3266	.3266	.3131	.3737	.3595	.3595	.3750	.3344	.3700	.3429	.3429	.3070	.3210	1B	UNC	3/8–16 or .375–16
		1A	.3328	.3054	.3269	.3263	.3137	.3736	.3596	.3596	.3756	.3347	.3694	.3426	.3432	.3071	.3209	1B		
		2A	.3331	.3060	.3287	.3287	.3152	.3737	.3643	---	.3750	.3344	.3672	.3401	.3401	.3070	.3210	2B		
		2A	.3328	.3054	.3290	.3284	.3158	.3736	.3644	---	.3756	.3347	.3666	.3398	.3404	.3071	.3209	2B		
		3A	.3344	.3073	.3311	.3311	.3176	.3750	.3656	---	.3750	.3344	.3658	.3387	.3387	.3070	.3182	3B		
		3A	.3341	.3067	.3314	.3308	.3182	.3749	.3657	---	.3756	.3347	.3652	.3384	.3390	.3071	.3181	3B		
3/8–20 or .375–20	UN	2A	.3413	.3196	.3372	.3372	.3264	.3738	.3657	---	.3750	.3425	.3733	.3479	.3479	.3210	.3320	2B	UN	3/8–20 or .375–20
		2A	.3410	.3191	.3375	.3369	.3269	.3737	.3658	---	.3755	.3428	.3728	.3476	.3482	.3211	.3319	2B		
		3A	.3425	.3208	.3394	.3394	.3286	.3750	.3669	---	.3750	.3425	.3708	.3465	.3465	.3210	.3297	3B		
		3A	.3422	.3203	.3397	.3391	.3291	.3749	.3670	---	.3755	.3428	.3703	.3462	.3468	.3211	.3296	3B		
3/8–24 or .375–24	UNF	1A	.3468	.3288	.3411	.3411	.3321	.3739	.3631	---	.3750	.3479	.3733	.3553	.3553	.3300	.3400	1B	UNF	3/8–24 or .375–24
		1A	.3465	.3283	.3414	.3408	.3326	.3738	.3632	---	.3755	.3482	.3728	.3550	.3556	.3301	.3399	1B		
		2A	.3468	.3288	.3430	.3430	.3340	.3739	.3667	---	.3750	.3479	.3708	.3528	.3528	.3300	.3400	2B		
		2A	.3465	.3283	.3433	.3427	.3345	.3738	.3668	---	.3755	.3482	.3703	.3525	.3531	.3301	.3399	2B		
		3A	.3479	.3299	.3450	.3450	.3360	.3750	.3678	---	.3750	.3479	.3696	.3516	.3516	.3300	.3372	3B		
		3A	.3476	.3294	.3453	.3447	.3365	.3749	.3679	---	.3755	.3482	.3691	.3513	.3519	.3301	.3371	3B		
3/8–28 or .375–28	UN	2A	.3507	.3352	.3471	.3471	.3394	.3739	.3674	---	.3750	.3518	.3719	.3564	.3564	.3360	.3450	2B	UN	3/8–28 or .375–28
		2A	.3504	.3347	.3474	.3468	.3399	.3738	.3675	---	.3755	.3521	.3714	.3561	.3567	.3361	.3449	2B		
		3A	.3518	.3363	.3491	.3491	.3414	.3750	.3685	---	.3750	.3518	.3708	.3553	.3553	.3360	.3426	3B		
		3A	.3515	.3358	.3494	.3488	.3419	.3749	.3686	---	.3755	.3521	.3703	.3550	.3556	.3361	.3425	3B		
3/8–32 or .375–32	UNEF	2A	.3537	.3402	.3503	.3503	.3435	.3740	.3680	---	.3750	.3547	.3726	.3591	.3591	.3410	.3490	2B	UNEF	3/8–32 or .375–32
		2A	.3534	.3397	.3506	.3500	.3440	.3739	.3681	---	.3755	.3550	.3721	.3588	.3594	.3411	.3489	2B		
		3A	.3547	.3412	.3522	.3522	.3454	.3750	.3690	---	.3750	.3547	.3715	.3580	.3580	.3410	.3469	3B		
		3A	.3544	.3407	.3525	.3519	.3459	.3749	.3691	---	.3755	.3550	.3710	.3577	.3583	.3411	.3468	3B		

7/16–14 or .4375–14	7/16–16 or .4375–16	7/16–20 or .375–20	7/16–28 or 375–28	7/16–32 or .4375–32	1/2–13 or .500–13	1/2–16 or .500–16	1/2–20 or .500–20	1/2–28 or .500–28	1/2–32 or .500–32	9/16–12 or .5625–12	9/16–16 or .5625–16	9/16–18 or .5625–18
UNC	UN	UNF	UNEF	UN	UNC	UN	UNF	UNEF	UN	UNC	UN	UNF
1B 2B 3B	2B 3B	1B 2B 3B	2B 3B	1B 2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	1B 2B 3B	2B 3B	1B 2B 3B
.3760 .3759 .3760 .3759 .3717 .3716	.3840 .3839 .3800 .3799	.3950 .3949 .3950 .3949 .3916 .3915	.4070 .4069 .4051 .4050	.4110 .4109 .4094 .4093	.4340 .4339 .4340 .4339 .4284 .4283	.4460 .4459 .4419 .4418	.4570 .4569 .4570 .4569 .4537 .4536	.4700 .4699 .4676 .4675	.4740 .4739 .4719 .4718	.4900 .4899 .4900 .4899 .4843 .4842	.5090 .5089 .5040 .5039	.5150 .5149 .5150 .5149 .5106 .5105
.3600 .3601 .3600 .3601 .3600 .3601	.3700 .3701 .3700 .3701	.3830 .3831 .3830 .3831 .3830 .3831	.3990 .3991 .3990 .3991	.4040 .4041 .4040 .4041	.4170 .4171 .4171 .4171 .4171 .4171	.4320 .4321 .4320 .4321	.4460 .4461 .4461 .4461	.4610 .4611 .4610 .4611	.4660 .4661 .4660 .4661	.4720 .4721 .4720 .4721 .4720 .4721	.4950 .4950 .4951	.5020 .5021 .5020 .5020 .5021
.4003 .4006 .3972 .3975 .3957 .3960	.4028 .4031 .4014 .4017	.4131 .4134 .4104 .4107 .4091 .4094	.4189 .4192 .4178 .4181	.4216 .4219 .4205 .4208	.4597 .4600 .4565 .4568 .4548 .4551	.4655 .4658 .4640 .4643	.4759 .4762 .4731 .4734 .4717 .4720	.4816 .4819 .4804 .4807	.4842 .4845 .4831 .4834	.5186 .5189 .5152 .5155 .5135 .5138	.5280 .5283 .5265 .5268	.5353 .5356 .5323 .5326 .5308 .5311
.4003 .4000 .3972 .3969 .3957 .3954	.4028 .4025 .4014 .4011	.4131 .4128 .4104 .4101 .4091 .4088	.4189 .4186 .4178 .4175	.4216 .4213 .4205 .4202	.4597 .4594 .4565 .4562 .4548 .4545	.4655 .4652 .4640 .4637	.4759 .4756 .4731 .4728 .4717 .4714	.4816 .4813 .4804 .4801	.4842 .4839 .4831 .4828	.5186 .5183 .5152 .5149 .5135 .5132	.5280 .5277 .5265 .5262	.5353 .5350 .5323 .5320 .5308 .5305
.4312 .4306 .4281 .4275 .4266 .4260	.4299 .4293 .4285 .4279	.4348 .4343 .4321 .4316 .4308 .4303	.4344 .4339 .4333 .4328	.4351 .4346 .4340 .4335	.4930 .4924 .4898 .4892 .4881 .4875	.4926 .4920 .4911 .4905	.4976 .4971 .4948 .4943 .4934 .4929	.4971 .4966 .4959 .4954	.4977 .4972 .4966 .4961	.5547 .5541 .5513 .5507 .5496 .5490	.5551 .5545 .5536 .5530	.5594 .5589 .5564 .5559 .5549 .5544
.3911 .3914 .3911 .3914 .3911 .3914	.3969 .3972 .3969 .3972	.4050 .4053 .4050 .4053 .4050 .4053	.4143 .4146 .4143 .4146	.4172 .4175 .4172 .4175	.4500 .4503 .4500 .4503 .4500 .4503	.4594 .4597 .4594 .4597	.4675 .4678 .4675 .4678 .4675 .4678	.4768 .4771 .4768 .4771	.4797 .4800 .4797 .4800	.5084 .5087 .5084 .5087 .5084 .5087	.5219 .5222 .5219 .5222	.5264 .5267 .5264 .5267 .5264 .5267
.4375 .4381 .4375 .4381 .4375 .4381	.4375 .4381 .4375 .4381	.4375 .4380 .4375 .4380 .4375 .4380	.4375 .4380 .4375 .4380	.4375 .4380 .4375 .4380	.5000 .5006 .5000 .5006 .5000 .5006	.5000 .5006 .5000 .5006	.5000 .5005 .5000 .5005 .5000 .5005	.5000 .5005 .5000 .5005	.5000 .5005 .5000 .5005	.5625 .5631 .5625 .5631 .5625 .5631	.5625 .5631 .5625 .5631	.5625 .5630 .5625 .5630 .5625 .5630
----	.4206 .4207	----	----	----	.4822 .4823	----	----	----	.5437 .5438	----	----	----
.4206 .4207 .4258 .4259 .4272 .4273	.4267 .4268 .4281 .4282	.4240 .4241 .4281 .4282 .4294 .4295	.4299 .4300 .4310 .4311	.4305 .4306 .4315 .4316	.4822 .4823 .4876 .4877 .4891 .4892	.4892 .4893 .4906 .4907	.4865 .4866 .4906 .4907 .4919 .4920	.4924 .4925 .4935 .4936	.4930 .4931 .4940 .4941	.5437 .5438 .5495 .5496 .5511 .5512	.5517 .5518 .5531 .5532	.5480 .5481 .5524 .5525 .5538 .5539
.4361 .4360 .4361 .4360 .4375 .4374	.4361 .4360 .4375 .4374	.4362 .4361 .4362 .4361 .4375 .4374	.4364 .4363 .4375 .4374	.4365 .4364 .4375 .4374	.4985 .4984 .4985 .4984 .5000 .4999	.4986 .4985 .5000 .4999	.4987 .4986 .4987 .4986 .5000 .4999	.4989 .4988 .5000 .4999	.4990 .4989 .5000 .4999	.5609 .5608 .5609 .5608 .5625 .5624	.5611 .5610 .5625 .5624	.5611 .5610 .5611 .5610 .5625 .5624
.3671 .3677 .3695 .3701 .3721 .3727	.3774 .3780 .3800 .3806	.3866 .3871 .3887 .3892 .3911 .3916	.4019 .4024 .4039 .4044	.4060 .4065 .4079 .4084	.4245 .4251 .4269 .4275 .4297 .4303	.4398 .4404 .4424 .4430	.4490 .4495 .4511 .4516 .4535 .4540	.4643 .4648 .4663 .4668	.4684 .4689 .4703 .4708	.4810 .4816 .4836 .4842 .4865 .4871	.5023 .5029 .5049 .5055	.5062 .5067 .5085 .5090 .5110 .5115
.3826 .3823 .3850 .3847 .3876 .3873	.3909 .3906 .3935 .3932	.3974 .3971 .3995 .3992 .4019 .4016	.4096 .4093 .4116 .4113	.4128 .4125 .4147 .4144	.4411 .4408 .4435 .4432 .4463 .4460	.4533 .4530 .4559 .4556	.4598 .4595 .4619 .4616 .4643 .4640	.4720 .4717 .4740 .4737	.4752 .4749 .4771 .4768	.4990 .4987 .5016 .5013 .5045 .5042	.5158 .5155 .5184 .5181	.5182 .5179 .5205 .5202 .5230 .5227
.3826 .3829 .3850 .3853 .3876 .3879	.3909 .3912 .3935 .3938	.3974 .3977 .3995 .3998 .4019 .4022	.4096 .4099 .4116 .4119	.4128 .4131 .4147 .4150	.4411 .4414 .4435 .4438 .4463 .4466	.4533 .4536 .4559 .4562	.4598 .4601 .4619 .4622 .4643 .4646	.4720 .4723 .4740 .4743	.4752 .4755 .4771 .4774	.4990 .4993 .5016 .5019 .5045 .5048	.5158 .5161 .5184 .5187	.5182 .5185 .5205 .5208 .5230 .5233
.3588 .3582 .3588 .3582 .3602 .3596	.3684 .3678 .3698 .3692	.3820 .3815 .3820 .3815 .3833 .3828	.3977 .3972 .3988 .3983	.4027 .4022 .4037 .4032	.4152 .4146 .4152 .4146 .4167 .4161	.4309 .4303 .4323 .4317	.4445 .4440 .4445 .4440 .4458 .4453	.4602 .4597 .4613 .4608	.4652 .4647 .4662 .4657	.4707 .4701 .4707 .4701 .4723 .4717	.4934 .4928 .4948 .4942	.5009 .5004 .5009 .5004 .5023 .5018
.3897 .3894 .3897 .3894 .3911 .3908	.3955 .3952 .3969 .3966	.4037 .4034 .4037 .4034 .4050 .4047	.4132 .4129 .4143 .4140	.4162 .4159 .4172 .4169	.4485 .4482 .4485 .4482 .4500 .4497	.4580 .4577 .4594 .4591	.4662 .4659 .4662 .4659 .4675 .4672	.4757 .4754 .4768 .4765	.4787 .4784 .4797 .4794	.5068 .5065 .5068 .5065 .5084 .5081	.5205 .5202 .5219 .5216	.5250 .5247 .5250 .5247 .5264 .5261
1A 2A 3A	2A 3A	1A 2A 3A	2A 3A	2A 3A	1A 2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	1A 2A 3A	2A 3A	1A 2A 3A
UNC	UN	UNF	UNEF	UN	UNC	UN	UNF	UNEF	UN	UNC	UN	UNF
7/16–14 or .4375–14	7/16–16 or .4375–16	7/16–20 or .4375–20	7/16–28 or .4375–28	7/16–32 or .4375–32	1/2–13 or .500–13	1/2–16 or .500–16	1/2–20 or .500–20	1/2–28 or .500–28	1/2–32 or .500–32	9/16–12 or .5625–12	9/16–16 or .5625–16	9/16–18 or .5625–18

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

| | | | Gages for external threads | | | | | | | | Gages for internal threads | | | | | | | | | |
| Nominal size and threads per inch | Series designation | Class | X thread ring gages GO — Pitch diam. | GO — Minor diam. | LO cl. 1A & 2A, NOT GO cl. 3A — Pitch diam. Plus tol. gage | Minus tol. gage | Minor diam. | Z plain ring GO | NOT GO Semifinished | NOT GO Unfinished hot-rolled material | X thread plug gages GO — Major diam. | GO — Pitch diam. | Major diam. | III Pitch diam. Minus tol. gage | Plus tol. gage | Z plug GO (minor) | NOT GO (minor) | Class | Series designation | Nominal size and threads per inch |
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
9/16-20 or .5625-20	UN	2A	.5287 / .5284	.5070 / .5065	.5245 / .5248	.5245 / .5242	.5137 / .5142	.5612 / .5611	.5531 / .5532		.5625 / .5630	.5300 / .5303	.5572 / .5558	.5355 / .5352	.5355 / .5341	.5080 / .5081	.5200 / .5199	2B	UN	9/16-20 or .5625-20
		3A	.5300 / .5297	.5083 / .5078	.5268 / .5271	.5268 / .5265	.5160 / .5165	.5625 / .5624	.5544 / .5545		.5625 / .5630	.5300 / .5303	.5558 / .5553	.5341 / .5338	.5341 / .5344	.5080 / .5081	.5162 / .5161	3B		
9/16-24 or .5625-24	UNEF	2A	.5342 / .5339	.5162 / .5157	.5303 / .5306	.5303 / .5300	.5213 / .5218	.5613 / .5612	.5541 / .5542		.5625 / .5630	.5354 / .5357	.5585 / .5580	.5405 / .5402	.5405 / .5408	.5170 / .5171	.5270 / .5269	2B	UNEF	9/16-24 or .5625-24
		3A	.5354 / .5351	.5174 / .5169	.5325 / .5328	.5325 / .5322	.5235 / .5240	.5625 / .5624	.5553 / .5554		.5625 / .5630	.5354 / .5357	.5572 / .5567	.5392 / .5389	.5392 / .5395	.5170 / .5171	.5244 / .5243	3B		
9/16-28 or .5625-28	UN	2A	.5382 / .5379	.5227 / .5222	.5345 / .5348	.5345 / .5342	.5268 / .5273	.5614 / .5613	.5549 / .5550		.5625 / .5630	.5393 / .5396	.5596 / .5591	.5441 / .5438	.5441 / .5444	.5240 / .5241	.5320 / .5319	2B	UN	9/16-28 or .5625-28
		3A	.5393 / .5390	.5238 / .5233	.5365 / .5368	.5365 / .5362	.5288 / .5293	.5625 / .5624	.5560 / .5561		.5625 / .5630	.5396 / .5396	.5584 / .5579	.5429 / .5426	.5429 / .5432	.5240 / .5241	.5301 / .5300	3B		
9/16-32 or .5625-32	UN	2A	.5412 / .5409	.5277 / .5272	.5377 / .5380	.5377 / .5374	.5309 / .5314	.5615 / .5614	.5555 / .5556		.5625 / .5630	.5422 / .5425	.5602 / .5597	.5467 / .5464	.5467 / .5470	.5290 / .5291	.5360 / .5359	2B	UN	9/16-32 or .5625-32
		3A	.5422 / .5419	.5287 / .5282	.5396 / .5399	.5396 / .5393	.5328 / .5333	.5625 / .5624	.5565 / .5566		.5625 / .5630	.5422 / .5425	.5591 / .5586	.5456 / .5453	.5456 / .5459	.5290 / .5291	.5344 / .5348	3B		
5/8-11 or .625-11	UNC	1A	.5644 / .5641	.5250 / .5244	.5561 / .5564	.5561 / .5558	.5364 / .5370	.6234 / .6233	.6052 / .6053	.6052 / .6053	.6250 / .6256	.5660 / .5663	.6161 / .6155	.5767 / .5764	.5767 / .5770	.5270 / .5271	.5460 / .5459	1B	UNC	5/8-11 or .625-11
		2A	.5644 / .5641	.5250 / .5244	.5589 / .5592	.5589 / .5586	.5392 / .5398	.6234 / .6233	.6113 / .6114		.6250 / .6256	.5660 / .5663	.6126 / .6120	.5732 / .5729	.5732 / .5735	.5270 / .5271	.5460 / .5459	2B		
		3A	.5660 / .5657	.5266 / .5260	.5619 / .5622	.5619 / .5616	.5422 / .5428	.6250 / .6249	.6129 / .6130		.6250 / .6256	.5660 / .5663	.6108 / .6102	.5714 / .5711	.5714 / .5717	.5270 / .5271	.5391 / .5390	3B		
5/8-12 or .625-12	UN	2A	.5693 / .5690	.5332 / .5326	.5639 / .5642	.5639 / .5636	.5459 / .5465	.6234 / .6233	.6120 / .6121		.6250 / .6256	.5709 / .5712	.6141 / .6135	.5780 / .5777	.5780 / .5783	.5350 / .5351	.5530 / .5529	2B	UN	5/8-12 or .625-12
		3A	.5709 / .5706	.5348 / .5342	.5668 / .5671	.5668 / .5665	.5488 / .5494	.6250 / .6249	.6136 / .6137		.6250 / .6256	.5712 / .5712	.6123 / .6117	.5762 / .5759	.5762 / .5765	.5350 / .5351	.5463 / .5462	3B		
5/8-16 or .625-16	UN	2A	.5830 / .5827	.5559 / .5553	.5782 / .5785	.5782 / .5779	.5647 / .5653	.6236 / .6235	.6142 / .6143		.6250 / .6256	.5844 / .5847	.6177 / .6171	.5906 / .5903	.5906 / .5909	.5570 / .5571	.5710 / .5709	2B	UN	5/8-16 or .625-16
		3A	.5844 / .5841	.5573 / .5567	.5808 / .5811	.5808 / .5805	.5673 / .5679	.6250 / .6249	.6156 / .6157		.6250 / .6256	.5844 / .5847	.6161 / .6155	.5890 / .5887	.5890 / .5893	.5570 / .5571	.5662 / .5661	3B		
5/8-18 or .625-18	UNF	1A	.5875 / .5872	.5634 / .5629	.5805 / .5808	.5805 / .5802	.5685 / .5690	.6236 / .6235	.6105 / .6106		.6250 / .6255	.5889 / .5892	.6221 / .6216	.5980 / .5977	.5980 / .5983	.5650 / .5651	.5780 / .5779	1B	UNF	5/8-18 or .625-18
		2A	.5875 / .5872	.5631 / .5629	.5828 / .5831	.5828 / .5825	.5708 / .5713	.6236 / .6235	.6149 / .6150		.6250 / .6255	.5889 / .5892	.6190 / .6185	.5949 / .5946	.5949 / .5952	.5650 / .5651	.5780 / .5779	2B		
		3A	.5889 / .5886	.5648 / .5643	.5854 / .5857	.5854 / .5851	.5734 / .5739	.6250 / .6249	.6163 / .6164		.6250 / .6255	.5889 / .5892	.6175 / .6170	.5934 / .5931	.5934 / .5937	.5650 / .5651	.5730 / .5729	3B		
5/8-20 or .625-20	UN	2A	.5912 / .5909	.5695 / .5690	.5869 / .5872	.5869 / .5866	.5761 / .5766	.6237 / .6236	.6156 / .6157		.6250 / .6255	.5925 / .5928	.6198 / .6193	.5981 / .5978	.5981 / .5984	.5710 / .5711	.5820 / .5819	2B	UN	5/8-20 or .625-20
		3A	.5925 / .5922	.5708 / .5703	.5893 / .5896	.5893 / .5890	.5785 / .5790	.6250 / .6249	.6169 / .6170		.6250 / .6255	.5925 / .5928	.6184 / .6179	.5967 / .5964	.5967 / .5970	.5710 / .5711	.5787 / .5786	3B		

Unified screw thread dimension table. Each size band lists four stacked values per column (class 2B max, 2B min, 3B max, 3B min — or the corresponding 1B/2B/3B / A‑class values). Internal‑thread classes (left): 2B / 3B (1B/2B/3B for UNC); external‑thread classes (right): 2A / 3A (1A/2A/3A for UNC).

Size	Series	Class	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
5⁄8–24 or .625-24	UNEF	2B/3B	.5900	.5800	.6031	.6031	.6211	.5979	.6250	----	.6166	.6238	.5837	.5927	.5927	.5787	.5967
			.5899	.5800	.6034	.6028	.6206	.5982	.6255	----	.6167	.6237	.5842	.5924	.5930	.5782	.5964
			.5869	.5800	.6018	.6018	.6198	.5979	.6250	----	.6178	.6250	.5859	.5949	.5949	.5799	.5979
			.5868	.5801	.6021	.6015	.6193	.5982	.6255	----	.6179	.6249	.5864	.5946	.5952	.5794	.5976
5⁄8–28 or .625-28	UN	2B/3B	.5950	.5860	.6067	.6067	.6222	.6018	.6250	----	.6174	.6239	.5892	.5969	.5969	.5852	.6007
			.5949	.5860	.6070	.6064	.6217	.6021	.6255	----	.6175	.6238	.5897	.5966	.5972	.5847	.6004
			.5926	.5860	.6055	.6055	.6210	.6018	.6250	----	.6185	.6250	.5913	.5990	.5990	.5863	.6018
			.5925	.5861	.6058	.6052	.6205	.6021	.6255	----	.6186	.6249	.5918	.5987	.5993	.5858	.6015
5⁄8–32 or .625-32	UN	2B/3B	.5990	.5910	.6093	.6093	.6228	.6047	.6250	----	.6179	.6239	.5932	.6000	.6000	.5901	.6036
			.5989	.5911	.6096	.6090	.6223	.6050	.6255	----	.6180	.6238	.5937	.5997	.6003	.5896	.6033
			.5969	.5910	.6082	.6082	.6217	.6047	.6250	----	.6190	.6250	.5952	.6020	.6020	.5912	.6047
			.5968	.5911	.6085	.6079	.6212	.6050	.6255	----	.6191	.6249	.5957	.6017	.6023	.5907	.6044
11⁄16–12 or .6875-12	UN	2B/3B	.6150	.5970	.6405	.6405	.6766	.6334	.6875	----	.6745	.6859	.6084	.6264	.6264	.6184	.6318
			.6149	.5971	.6408	.6402	.6760	.6337	.6881	----	.6746	.6858	.6090	.6261	.6267	.6178	.6315
			.6085	.5970	.6387	.6387	.6748	.6334	.6875	----	.6761	.6875	.6113	.6293	.6293	.6198	.6334
			.6084	.5971	.6390	.6384	.6742	.6337	.6881	----	.6762	.6874	.6119	.6290	.6296	.6192	.6331
11⁄16–16 or .6875-16	UN	2B/3B	.6340	.6200	.6531	.6531	.6802	.6469	.6875	----	.6767	.6861	.6272	.6407	.6407	.6320	.6455
			.6339	.6201	.6534	.6528	.6796	.6472	.6881	----	.6768	.6860	.6278	.6404	.6410	.6315	.6452
			.6284	.6200	.6515	.6515	.6786	.6469	.6875	----	.6781	.6875	.6298	.6433	.6433	.6333	.6469
			.6283	.6201	.6518	.6512	.6780	.6472	.6881	----	.6782	.6874	.6304	.6430	.6436	.6328	.6466
11⁄16–20 or .6875-20	UN	2B/3B	.6450	.6330	.6606	.6606	.6823	.6550	.6875	----	.6781	.6862	.6386	.6494	.6494	.6412	.6537
			.6449	.6331	.6609	.6603	.6818	.6553	.6880	----	.6782	.6861	.6391	.6491	.6497	.6407	.6534
			.6412	.6330	.6592	.6592	.6809	.6550	.6875	----	.6794	.6875	.6410	.6515	.6518	.6424	.6550
			.6411	.6331	.6595	.6589	.6804	.6553	.6880	----	.6795	.6874	.6415	.6515	.6521	.6419	.6547
11⁄16–24 or .6875-24	UNEF	2B/3B	.6520	.6420	.6656	.6656	.6836	.6604	.6875	----	.6791	.6863	.6462	.6552	.6552	.6412	.6592
			.6519	.6421	.6659	.6653	.6831	.6607	.6880	----	.6792	.6862	.6467	.6549	.6555	.6407	.6589
			.6494	.6420	.6643	.6643	.6823	.6604	.6875	----	.6803	.6875	.6484	.6574	.6574	.6424	.6604
			.6493	.6421	.6646	.6640	.6818	.6607	.6880	----	.6804	.6874	.6489	.6571	.6577	.6419	.6601
11⁄16–28 or .6875-28	UN	2B/3B	.6570	.6490	.6692	.6692	.6847	.6643	.6875	----	.6799	.6864	.6517	.6594	.6594	.6477	.6632
			.6569	.6490	.6695	.6689	.6842	.6646	.6880	----	.6800	.6863	.6522	.6591	.6597	.6472	.6629
			.6551	.6490	.6680	.6680	.6835	.6643	.6875	----	.6810	.6875	.6538	.6615	.6615	.6488	.6643
			.6550	.6491	.6683	.6677	.6830	.6646	.6880	----	.6811	.6874	.6543	.6612	.6618	.6483	.6640
11⁄16–32 or .6875-32	UN	2B/3B	.6610	.6540	.6721	.6718	.6853	.6672	.6875	----	.6804	.6864	.6557	.6625	.6625	.6526	.6661
			.6609	.6541	.6721	.6715	.6848	.6675	.6880	----	.6805	.6863	.6562	.6622	.6628	.6521	.6658
			.6594	.6540	.6707	.6707	.6842	.6672	.6875	.7288	.6815	.6875	.6577	.6645	.6645	.6537	.6672
			.6593	.6541	.6710	.6704	.6837	.6675	.6880	.7289	.6816	.6874	.6582	.6642	.6648	.6532	.6669
3⁄4–10 or .750-10	UNC	1B/2B/3B	.6780	.6600	.6965	.6965	.7398	.6850	.7500	----	.7343	.7485	.6869	.7004	.7004	.6945	.7079
			.6779	.6601	.6968	.6962	.7392	.6853	.7506	----	.7344	.7484	.6875	.7001	.7007	.6940	.7076
			.6707	.6600	.6927	.6927	.7360	.6850	.7500	----	.7391	.7500	.6894	.7029	.7029	.6958	.7079
			.6706	.6601	.6930	.6924	.7354	.6853	.7506	----	.7392	.7499	.6900	.7026	.7032	.6953	.7091
3⁄4–12 or .750-12	UN	2B/3B	.6960	.6900	.7192	.7192	.7463	.7094	.7500	----	.7423	.7488	.7010	.7118	.7118	.7101	.7162
			.6959	.6901	.7195	.7189	.7457	.7097	.7506	----	.7424	.7487	.7015	.7115	.7121	.7096	.7159
			.6960	.6900	.7159	.7159	.7430	.7094	.7500	----	.7435	.7500	.7034	.7142	.7142	.7113	.7175
			.6959	.6901	.7162	.7156	.7424	.7097	.7506	----	.7436	.7499	.7039	.7139	.7145	.7108	.7172
3⁄4–16 or .750-16	UNF	2B/3B	.6960	.6820	.7318	.7318	.7473	.7208	.7500	----	.7429	.7489	.7141	.7218	.7218	.7151	.7286
			.6959	.6821	.7321	.7315	.7468	.7211	.7505	----	.7430	.7488	.7146	.7215	.7221	.7146	.7283
			.6908	.6820	.7305	.7305	.7460	.7208	.7500	----	.7440	.7500	.7162	.7239	.7239	.7162	.7297
			.6907	.6821	.7308	.7302	.7455	.7211	.7505	----	.7441	.7499	.7167	.7236	.7242	.7157	.7294
3⁄4–20 or .750-20	UNEF	2B/3B	.7070	.6960	.7232	.7232	.7449	.7175	.7500	----	.7406	.7487	.7182	.7250	.7250	.6945	.7162
			.7069	.6961	.7235	.7229	.7444	.7178	.7505	----	.7407	.7486	.7187	.7247	.7253	.6940	.7159
			.7037	.6960	.7218	.7218	.7435	.7175	.7500	----	.7419	.7500	.7202	.7270	.7270	.6958	.7175
			.7036	.6961	.7221	.7215	.7430	.7178	.7505	----	.7420	.7499	.7207	.7267	.7273	.6953	.7172
3⁄4–28 or .750-28	UN	2B/3B	.7200	.7110	.7344	.7344	.7473	.7297	.7500	----	.7429	.7489	.7101	.7218	.7218	.7101	.7256
			.7199	.7111	.7347	.7341	.7468	.7300	.7505	----	.7430	.7488	.7096	.7215	.7221	.7096	.7253
			.7176	.7110	.7333	.7333	.7460	.7297	.7500	----	.7440	.7500	.7113	.7239	.7239	.7113	.7268
			.7175	.7111	.7336	.7330	.7455	.7300	.7505	----	.7441	.7499	.7108	.7236	.7242	.7108	.7265
3⁄4–32 or .750-32	UN	2B/3B	.7240	.7160	.7344	.7344	.7479	.7297	.7500	----	.7429	.7489	.7151	.7250	.7250	.7151	.7286
			.7239	.7161	.7347	.7341	.7474	.7300	.7505	----	.7430	.7488	.7146	.7253	.7253	.7146	.7283
			.7219	.7160	.7333	.7333	.7468	.7297	.7500	----	.7440	.7500	.7162	.7270	.7270	.7162	.7297
			.7218	.7161	.7336	.7330	.7463	.7300	.7505	----	.7441	.7499	.7157	.7273	.7273	.7157	.7294

(External thread classes on the mirrored side: 2A / 3A, with 1A / 2A / 3A for the UNC ¾–10 entry; series labels repeat UNEF, UN, UNC, UNF.)

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TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Gages for external threads

Nominal size and threads per inch	Series designation	Class	X thread ring gages GO — Pitch diameter	X thread ring gages GO — Minor diameter	I.O., classes 1A and 2A, NOT GO, class 3A — Pitch diameter Plus tolerance gage	I.O., classes 1A and 2A, NOT GO, class 3A — Pitch diameter Minus tolerance gage	I.O. — Minor diameter	Z plain ring gages for major diameter — GO	Z plain ring gages — NOT GO Semifinished	Z plain ring gages — NOT GO Unfinished hot-rolled material
		1	4	5	6	7	8	9	10	11
	2	3	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
13⁄16-12 or .8125-12	UN	2A	.7567 .7564	.7206 .7200	.7512 .7515	.7512 .7509	.7332 .7338	.8108 .8107	.7994 .7995	------
		3A	.7584 .7581	.7223 .7217	.7543 .7546	.7543 .7540	.7363 .7369	.8125 .8124	.8011 .8012	------
13⁄16-16 or .8125-16	UN	2A	.7704 .7701	.7433 .7427	.7655 .7658	.7655 .7652	.7520 .7526	.8110 .8109	.8016 .8017	------
		3A	.7719 .7716	.7448 .7442	.7683 .7686	.7683 .7680	.7548 .7554	.8125 .8124	.8031 .8032	------
13⁄16-20 or .8125-20	UNEF	2A	.7787 .7784	.7570 .7565	.7743 .7746	.7743 .7740	.7635 .7640	.8112 .8111	.8031 .8032	------
		3A	.7800 .7797	.7583 .7578	.7767 .7770	.7767 .7764	.7659 .7664	.8125 .8124	.8044 .8045	------
13⁄16-28 or .8125-28	UN	2A	.7881 .7878	.7726 .7721	.7843 .7846	.7843 .7840	.7766 .7771	.8113 .8112	.8048 .8049	------
		3A	.7893 .7890	.7738 .7733	.7864 .7867	.7864 .7861	.7787 .7792	.8125 .8124	.8060 .8061	------
13⁄16-32 or .8125-32	UN	2A	.7911 .7908	.7776 .7771	.7875 .7878	.7875 .7872	.7807 .7812	.8114 .8113	.8054 .8055	------
		3A	.7922 .7919	.7787 .7782	.7895 .7898	.7895 .7892	.7827 .7832	.8125 .8124	.8065 .8066	------
7⁄8-9 or .875-9	UNC	1A	.8009 .8006	.7528 .7521	.7914 .7917	.7914 .7911	.7673 .7680	.87310 .87298	.85230 .85242	.85230 .85242
		2A	.8009 .8006	.7528 .7521	.7946 .7949	.7946 .7943	.7705 .7712	.87310 .87298	.85920 .85932	------
		3A	.8028 .8025	.7547 .7540	.7981 .7984	.7981 .7978	.7740 .7747	.87500 .87488	.86110 .86122	------
7⁄8-12 or .875-12	UN	2A	.8192 .8189	.7831 .7825	.8137 .8140	.8137 .8134	.7957 .7963	.87330 .87318	.86190 .86202	------
		3A	.8209 .8206	.7848 .7842	.8168 .8171	.8168 .8165	.7988 .7994	.87500 .87488	.86360 .86372	------
7⁄8-14 or .875-14	UNF	1A	.8270 .8267	.7961 .7955	.8189 .8192	.8189 .8186	.8034 .8040	.87340 .87328	.85790 .85802	------
		2A	.8270 .8267	.7961 .7955	.8216 .8219	.8216 .8213	.8061 .8067	.87340 .87328	.86310 .86322	------
		3A	.8286 .8283	.7977 .7971	.8245 .8248	.8245 .8242	.8090 .8096	.87500 .87488	.86470 .86482	------
7⁄8-16 or .875-16	UN	2A	.8329 .8326	.8058 .8052	.8280 .8283	.8280 .8277	.8145 .8151	.87350 .87338	.86410 .86422	------
		3A	.8344 .8341	.8073 .8067	.8308 .8311	.8308 .8305	.8173 .8179	.87500 .87488	.86560 .86572	------
7⁄8-20 or .875-20	UNEF	2A	.8412 .8409	.8195 .8190	.8368 .8371	.8368 .8365	.8260 .8265	.87370 .87358	.86560 .86572	------
		3A	.8425 .8422	.8208 .8203	.8392 .8395	.8392 .8389	.8284 .8289	.87500 .87488	.86690 .86702	------

Gages for internal threads

X thread plug gages GO — Major diameter	X thread plug gages GO — Pitch diameter	III — Major diameter	III — Pitch diameter Minus tolerance gage	III — Pitch diameter Plus tolerance gage	Z plain plug gages for minor diameter — GO	Z plain plug gages for minor diameter — NOT GO	Class	Series designation	Nominal size and threads per inch
12	13	14	15	16	17	18	19	20	21
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
.8125 .8131	.7584 .7587	.8017 .8011	.7656 .7653	.7656 .7659	.7220 .7221	.7400 .7399	2B	UN	13⁄16-12 or .8125-12
.8125 .8131	.7584 .7587	.7999 .7993	.7638 .7635	.7638 .7641	.7220 .7221	.7329 .7328	3B		
.8125 .8131	.7719 .7722	.8053 .8047	.7782 .7779	.7782 .7785	.7450 .7451	.7590 .7589	2B	UN	13⁄16-16 or .8125-16
.8125 .8131	.7719 .7722	.8037 .8031	.7766 .7763	.7766 .7769	.7450 .7451	.7533 .7532	3B		
.8125 .8130	.7800 .7803	.8074 .8069	.7857 .7854	.7857 .7860	.7580 .7581	.7700 .7699	2B	UNEF	13⁄16-20 or .8125-20
.8125 .8130	.7800 .7803	.8060 .8055	.7843 .7840	.7843 .7846	.7580 .7581	.7662 .7661	3B		
.8125 .8130	.7893 .7896	.8098 .8093	.7943 .7940	.7943 .7946	.7740 .7741	.7820 .7819	2B	UN	13⁄16-28 or .8125-28
.8125 .8130	.7893 .7896	.8085 .8080	.7930 .7927	.7930 .7933	.7740 .7741	.7801 .7800	3B		
.8125 .8130	.7922 .7925	.8104 .8099	.7969 .7966	.7969 .7972	.7790 .7790	.7860 .7859	2B	UN	13⁄16-32 or .8125-32
.8125 .8130	.7922 .7925	.8093 .8088	.7958 .7955	.7958 .7961	.7790 .7791	.7844 .7843	3B		
.8750 .8757	.8028 .8031	.8632 .8625	.8151 .8148	.8151 .8154	.75500 .75512	.77800 .77788	1B	UNC	7⁄8-9 or .875-9
.8750 .8757	.8028 .8031	.8591 .8584	.8110 .8107	.8110 .8113	.75500 .75512	.77800 .77788	2B		
.8750 .8757	.8028 .8031	.8570 .8563	.8089 .8086	.8089 .8092	.75500 .75512	.76810 .76798	3B		
.8750 .8756	.8286 .8289	.8642 .8636	.8281 .8278	.8281 .8284	.78500 .78512	.80300 .80288	2B	UN	7⁄8-12 or .875-12
.8750 .8756	.8286 .8289	.8624 .8618	.8263 .8260	.8263 .8266	.78500 .78512	.79520 .79508	3B		
.8750 .8756	.8286 .8289	.8701 .8695	.8392 .8389	.8392 .8395	.79500 .79512	.81400 .81388	1B	UNF	7⁄8-14 or .875-14
.8750 .8756	.8286 .8289	.8665 .8659	.8356 .8353	.8356 .8359	.79800 .79812	.81400 .81388	2B		
.8750 .8756	.8286 .8289	.8648 .8642	.8339 .8336	.8339 .8342	.79800 .79812	.80680 .80668	3B		
.8750 .8755	.8344 .8347	.8678 .8672	.8407 .8404	.8407 .8410	.80700 .80712	.82100 .82088	2B	UN	7⁄8-16 or .875-16
.8750 .8755	.8344 .8347	.8662 .8656	.8391 .8388	.8391 .8394	.80700 .80712	.81580 .81568	3B		
.8750 .8755	.8425 .8428	.8699 .8694	.8482 .8479	.8482 .8485	.82100 .82112	.83200 .83188	2B	UNEF	7⁄8-20 or .875-20
.8750 .8755	.8425 .8428	.8685 .8680	.8468 .8465	.8468 .8471	.82100 .82112	.82870 .82858	3B		

Thread designations, standard series, and classes

Col	Thread designation	Series	Internal class	External class
1	7/8-28 or .875-28	UN	2B 3B	2A 3A
2	7/8-32 or .875-32	UN	2B 3B	2A 3A
3	15/16-12 or .9375-12	UN	2B 3B	2A 3A
4	15/16-16 or .9375-16	UN	2B 3B	2A 3A
5	15/16-20 or .9375-20	UNEF	2B 3B	2A 3A
6	15/16-28 or .9375-28	UN	2B 3B	2A 3A
7	15/16-32 or .9375-32	UN	2B 3B	2A 3A
8	1-8 or 1.000-8	UNC	1B 2B 3B	1A 2A 3A
9	1-12 or 1.000-12	UNF	1B 2B 3B	1A 2A 3A
10	1-16 or 1.000-16	UN	2B 3B	2A 3A
11	1-20 or 1.000-20	UNEF	2B 3B	2A 3A
12	1-28 or 1.000-28	UN	2B 3B	2A 3A
13	1-32 or 1.000-32	UN	2B 3B	2A 3A
14	1 1/16-8 or 1.0625-8	UN	2B 3B	2A 3A
15	1 1/16-12 or 1.0625-12	UN	2B 3B	2A 3A

Internal-thread limit bands (read top-down; columns = bands 1–7)

Col	B1	B2	B3	B4	B5	B6	B7
1	84500 84488 84200 84248	83600 83612 83600 83612	8568 8571 8555 8558	8568 8565 8555 8552	8723 8718 8710 8705	8518 8521 8518 8521	8750 8755 8750 8755
2	84900 84888 84600 84678	84100 84112 84100 84112	8594 8597 8583 8586	8594 8591 8583 8580	8729 8724 8718 8713	8547 8550 8547 8550	8750 8755 8750 8755
3	86500 86488 85750 85738	84700 84712 84700 84712	8908 8911 8883 8892	8908 8905 8889 8886	9269 9293 9250 9244	8969 8972 8969 8972	9375 9381 9375 9381
4	88400 88388 87830 87818	87000 87012 87000 87012	9034 9037 9018 9021	9034 9031 9018 9015	9305 9299 9289 9283	9050 9053 9050 9053	9375 9381 9375 9381
5	89500 89488 89120 89108	88300 88312 88300 88312	9109 9112 9094 9097	9109 9106 9094 9091	9326 9321 9311 9306	9143 9146 9143 9146	9375 9380 9375 9380
6	90700 90688 90510 90498	88900 88912 88900 88912	9195 9198 9182 9185	9195 9192 9182 9179	9356 9351 9344 9339	9172 9175 9172 9175	9375 9380 9375 9380
7	91100 91088 90910 90928	90400 90412 90400 90412	9221 9224 9209 9212	9221 9218 9209 9206	9356 9351 9344 9339	9172 9175 9172 9175	9375 9380 9375 9380
8	89000 88988 89000 88988 87970 87958	86500 86512 86500 86500 86500 86512	9330 9324 9280 9276 9254 9258	9330 9316 9276 9272 9254 9250	9861 9854 9817 9810 9795 9788	9188 9192 9188 9192 9188 9192	1.0000 1.0007 1.0000 1.0007 1.0000 1.0007
9	92800 92788 92300 92288	91000 91012 91000 91012	9573 9576 9538 9519	9573 9570 9532 9513	9934 9928 9896 9871	9459 9462 9459 9462	1.0000 1.0006 1.0000 1.0006
10	94600 94588 94080 94068	93200 93212 93200 93212	9659 9662 9643 9646	9659 9656 9643 9640	9951 9946 9936 9931	9594 9597 9594 9597	1.0000 1.0005 1.0000 1.0005
11	95700 95688 95370 95358	94600 94612 94600 94612	9734 9737 9719 9722	9734 9731 9719 9716	9975 9970 9962 9957	9675 9678 9675 9678	1.0005 1.0005 1.0000 1.0005
12	97000 96958 96760 96748	96100 96112 96100 96112	9820 9823 9807 9810	9820 9817 9807 9804	9975 9970 9962 9957	9768 9768 9768 9771	1.0000 1.0005 1.0000 1.0005
13	97400 97388 97190 97178	92700 92712 92700 92712	9846 9849 9834 9837	9846 9843 9834 9831	9981 9976 9969 9964	9797 9800 9797 9800	1.0000 1.0005 1.0000 1.0005
14	95200 95188 94220 94208	97300 97212 97300 97212	9902 9906 9880 9884	9902 9898 9880 9876	1.0443 1.0436 1.0421 1.0414	9813 9817 9813 9817	1.0625 1.0632 1.0625 1.0632
15	99000 98958 98230 98218	97300 97212 97300 97212	1.0158 1.0161 1.0139 1.0142	1.0158 1.0155 1.0139 1.0136	1.0519 1.0513 1.0500 1.0494	1.0084 1.0087 1.0084 1.0087	1.0625 1.0631 1.0625 1.0631

(Separator band — dashed across all columns except col 6/col 8 area: 97550 97562)

External-thread limit bands (read bottom-up; columns = bands 9–15)

Col	B9	B10	B11	B12	B13	B14	B15
1	86730 86742 86850 86862	87380 87368 87500 87488	8391 8396 8412 8417	8468 8465 8489 8486	8468 8471 8489 8492	8351 8346 8363 8358	8506 8503 8518 8515
2	86790 86802 86900 86912	87390 87378 87500 87488	8432 8437 8452 8457	8500 8497 8520 8517	8500 8503 8520 8523	8401 8396 8412 8407	8536 8533 8547 8544
3	92440 92452 92610 92622	93580 93568 93750 93738	8580 8586 8612 8618	8760 8757 8792 8789	8760 8763 8792 8795	8683 8677 8698 8692	8954 8951 8969 8966
4	92660 92672 92810 92822	93600 93588 93750 93738	8769 8775 8797 8803	8904 8901 8932 8929	8904 8907 8932 8935	8819 8814 8833 8828	9036 9033 9050 9047
5	92800 92812 92940 92952	93610 93598 93750 93738	8888 8888 8908 8913	8991 8988 9016 9013	8991 8994 9016 9019	8976 8971 8988 8983	9131 9128 9143 9140
6	92990 92992 93100 93112	93630 93618 93750 93738	9014 9019 9036 9041	9091 9088 9113 9110	9091 9094 9113 9116	9026 9021 9037 9032	9161 9158 9172 9169
7	93040 93052 93150 93162	93640 93628 93750 93738	9055 9060 9076 9081	9123 9120 9144 9141	9123 9126 9144 9147	9026 9021 9037 9032	9161 9158 9172 9169
8	97550 97562 98300 98312 98500 98512	99800 99788 99800 99788 1.00000 99988	8796 8803 8829 8836 8866 8873	9067 9063 9100 9096 9137 9133	9067 9071 9100 9104 9137 9141	8627 8620 8620 8647 8640	9168 9164 9168 9164 9188 9184
9	98100 98112 98600 98612	99820 99808 99800 99808 1.00000 99988	9173 9179 9202 9208 9235 9241	9353 9350 9382 9379 9415 9412	9353 9356 9382 9385 9415 9418	9080 9074 9074 9092	9441 9438 9441 9459 9456
10	98910 98922 99060 99072	99860 99848 1.00000 99988	9394 9400 9422 9428	9529 9526 9557 9554	9529 9532 9557 9560	9308 9302 9323 9317	9579 9576 9594 9591
11	99050 99062 99190 99202	99880 99868 1.00000 99988	9508 9513 9533 9538	9616 9613 9641 9638	9616 9619 9641 9644	9444 9439 9458 9453	9661 9658 9675 9672
12	99230 99242 99350 99362	99890 99878 1.00000 99988	9639 9644 9661 9666	9716 9713 9738 9735	9716 9719 9738 9741	9601 9596 9613 9608	9756 9753 9768 9765
13	99290 99302 99400 99412	99890 99878 1.00000 99988	9680 9685 9701 9706	9748 9745 9769 9766	9748 9751 9769 9772	9651 9646 9662 9657	9786 9783 9797 9794
14	1.04550 1.04562 1.04750 1.04762	1.06050 1.06038 1.06250 1.06238	9454 9461 9491 9498	9725 9721 9762 9758	9725 9729 9762 9766	9252 9245 9272 9265	9793 9789 9813 9809
15	1.04940 1.04952 1.05110 1.05122	1.06060 1.06068 1.06250 1.06238	9830 9836 9862 9868	1.0010 1.0007 1.0042 1.0039	1.0010 1.0013 1.0042 1.0045	9706 9700 9723 9717	1.0067 1.0064 1.0084 1.0081

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

The table is divided into **Gages for external threads** (columns 1–11) and **Gages for internal threads** (columns 12–21). Column group headings:

- External: *X thread ring gages* (GO Pitch diameter, GO Minor diameter; LO classes 1A and 2A, not GO class 3A: Plus tolerance gage Pitch diameter, Minus tolerance gage Pitch diameter, Minor diameter); *Z plain ring gages for major diameter* (GO; NOT GO: Semi-finished, Unfinished hot-rolled material).
- Internal: *X thread plug gages* (GO: Major diameter, Pitch diameter; III: Major diameter, Pitch diameter [Minus tolerance gage, Plus tolerance gage]); *Z plain plug gages for minor diameter* (GO, NOT GO).

(1) Nominal size and threads per inch	(2) Series desig.	(3) Class	(4) GO Pitch dia.	(5) GO Minor dia.	(6) LO Plus tol. PD	(7) LO Minus tol. PD	(8) Minor dia.	(9) Z GO major	(10) Semi-finished	(11) Unfin. hot-rolled	(12) GO Major dia.	(13) GO Pitch dia.	(14) III Major dia.	(15) III Minus tol. PD	(16) III Plus tol. PD	(17) Z GO minor	(18) NOT GO	(19) Class	(20) Series desig.	(21) Nominal size and threads per inch
1 1/16-16 or 1.0625-16	UN	2A	1.0204 / 1.0201	.9933 / .9927	1.0154 / 1.0157	1.0154 / 1.0151	1.0019 / 1.0025	1.06100 / 1.06088	1.05160		1.0625 / 1.0631	1.0219 / 1.0222	1.0555 / 1.0549	1.0281 / 1.0281	1.0284 / 1.0287	.99500 / .99500	1.00900 / 1.00888	2B	UN	1 1/16-16 or 1.0625-16
		3A	1.0219 / 1.0216	.9948 / .9942	1.0182 / 1.0185	1.0182 / 1.0179	1.0047 / 1.0053	1.06250 / 1.06238	1.05310 / 1.05322		1.0625 / 1.0631	1.0219 / 1.0222	1.0539 / 1.0533	1.0268 / 1.0265	1.0268 / 1.0271	.99512 / .99512	1.00380 / 1.00318	3B		
1 1/16-18 or 1.0625-18	UNEF	2A	1.0250 / 1.0247	1.0009 / 1.0004	1.0203 / 1.0206	1.0203 / 1.0200	1.0083 / 1.0088	1.06110 / 1.06098	1.05240 / 1.05252		1.0625 / 1.0630	1.0264 / 1.0267	1.0567 / 1.0562	1.0326 / 1.0323	1.0326 / 1.0329	1.00200 / 1.00212	1.01500 / 1.01488	2B	UNEF	1 1/16-18 or 1.0625-18
		3A	1.0264 / 1.0261	1.0023 / 1.0018	1.0228 / 1.0231	1.0228 / 1.0225	1.0108 / 1.0113	1.06250 / 1.06238	1.05380 / 1.05392		1.0625 / 1.0630	1.0264 / 1.0267	1.0551 / 1.0546	1.0310 / 1.0307	1.0310 / 1.0313	1.00200 / 1.00212	1.01050 / 1.01038	3B		
1 1/16-20 or 1.0625-20	UN	2A	1.0286 / 1.0283	1.0069 / 1.0064	1.0241 / 1.0244	1.0241 / 1.0238	1.0133 / 1.0138	1.06130 / 1.06118	1.05300 / 1.05312		1.0625 / 1.0630	1.0300 / 1.0303	1.0576 / 1.0571	1.0359 / 1.0356	1.0359 / 1.0362	1.00800 / 1.00812	1.02000 / 1.01988	2B	UN	1 1/16-20 or 1.0625-20
		3A	1.0300 / 1.0297	1.0083 / 1.0078	1.0266 / 1.0269	1.0266 / 1.0263	1.0158 / 1.0163	1.06250 / 1.06238	1.05440 / 1.05452		1.0625 / 1.0630	1.0300 / 1.0303	1.0561 / 1.0556	1.0344 / 1.0341	1.0344 / 1.0347	1.00800 / 1.00812	1.01620 / 1.01608	3B		
1 1/16-28 or 1.0625-28	UN	2A	1.0381 / 1.0378	1.0226 / 1.0221	1.0341 / 1.0314	1.0341 / 1.0338	1.0264 / 1.0269	1.06130 / 1.06118	1.05480 / 1.05492		1.0625 / 1.0630	1.0393 / 1.0396	1.0600 / 1.0595	1.0445 / 1.0442	1.0445 / 1.0448	1.02400 / 1.02412	1.03200 / 1.03188	2B	UN	1 1/16-28 or 1.0625-28
		3A	1.0393 / 1.0390	1.0238 / 1.0233	1.0363 / 1.0366	1.0363 / 1.0360	1.0286 / 1.0291	1.06250 / 1.06238	1.05600 / 1.05612		1.0625 / 1.0630	1.0393 / 1.0396	1.0587 / 1.0582	1.0432 / 1.0429	1.0432 / 1.0435	1.02400 / 1.02412	1.03010 / 1.02998	3B		
1 1/8-7 or 1.125-7	UNC	1A	1.0300 / 1.0296	.9681 / .9674	1.0191 / 1.0195	1.0191 / 1.0187	.9882 / .9889	1.12280 / 1.12268	1.09820 / 1.09832	1.09820 / 1.09832	1.1250 / 1.1257	1.0322 / 1.0326	1.1082 / 1.1075	1.0463 / 1.0459	1.0463 / 1.0467	.97000 / .97012	.99800 / .99788	1B	UNC	1 1/8-7 or 1.125-7
		2A	1.0300 / 1.0296	.9681 / .9674	1.0228 / 1.0232	1.0228 / 1.0224	.9919 / .9926	1.12280 / 1.12268	1.10640 / 1.10652		1.1250 / 1.1257	1.0322 / 1.0326	1.1035 / 1.1028	1.0416 / 1.0412	1.0416 / 1.0420	.97000 / .97012	.99800 / .99788	2B		
		3A	1.0322 / 1.0318	.9703 / .9696	1.0268 / 1.0272	1.0268 / 1.0264	.9959 / .9966	1.12500 / 1.12488	1.10860 / 1.10872	1.10040 / 1.10052	1.1250 / 1.1257	1.0322 / 1.0326	1.1012 / 1.1005	1.0393 / 1.0389	1.0393 / 1.0397	.97000 / .97012	.98750 / .98738	3B		
1 1/8-8 or 1.125-8	UN	2A	1.0417 / 1.0413	.9876 / .9869	1.0348 / 1.0352	1.0348 / 1.0344	1.0077 / 1.0084	1.12290 / 1.12278	1.10790 / 1.10802	1.10040 / 1.10052	1.1250 / 1.1256	1.0438 / 1.0442	1.1187 / 1.1181	1.0528 / 1.0524	1.0528 / 1.0532	.99000 / .99012	1.01500 / 1.01488	2B	UN	1 1/8-8 or 1.125-8
		3A	1.0438 / 1.0434	.9897 / .9890	1.0386 / 1.0390	1.0386 / 1.0382	1.0115 / 1.0122	1.12500 / 1.12488	1.11000 / 1.11012		1.1250 / 1.1256	1.0438 / 1.0442	1.1148 / 1.1142	1.0505 / 1.0501	1.0505 / 1.0509	.99000 / .99012	1.00470 / 1.00458	3B		
1 1/8-12 or 1.125-12	UNF	1A	1.0691 / 1.0688	1.0330 / 1.0324	1.0601 / 1.0604	1.0601 / 1.0598	1.0421 / 1.0427	1.12320 / 1.12308	1.10600 / 1.10612		1.1259 / 1.1256	1.0709 / 1.0712	1.1192 / 1.1187	1.0826 / 1.0823	1.0826 / 1.0829	1.03500 / 1.03512	1.05300 / 1.05288	1B	UNF	1 1/8-12 or 1.125-12
		2A	1.0691 / 1.0688	1.0330 / 1.0324	1.0631 / 1.0634	1.0631 / 1.0628	1.0451 / 1.0457	1.12320 / 1.12308	1.11180 / 1.11192		1.1250 / 1.1256	1.0709 / 1.0712	1.1180 / 1.1174	1.0787 / 1.0784	1.0787 / 1.0790	1.03500 / 1.03512	1.05300 / 1.05288	2B		
		3A	1.0709 / 1.0706	1.0348 / 1.0342	1.0664 / 1.0667	1.0664 / 1.0661	1.0484 / 1.0490	1.12500 / 1.12488	1.11360 / 1.11372		1.1250 / 1.1256	1.0709 / 1.0712	1.1164 / 1.1158	1.0768 / 1.0765	1.0768 / 1.0771	1.03500 / 1.03512	1.04480 / 1.04468	3B		
1 1/8-16 or 1.125-16	UN	2A	1.0825 / 1.0822	1.0558 / 1.0552	1.0779 / 1.0782	1.0779 / 1.0776	1.0644 / 1.0650	1.12350 / 1.12338	1.11410 / 1.11422		1.1250 / 1.1256	1.0844 / 1.0847	1.1180 / 1.1174	1.0909 / 1.0906	1.0909 / 1.0912	1.05700 / 1.05712	1.07100 / 1.07088	2B	UN	1 1/8-16 or 1.125-16
		3A	1.0844 / 1.0841	1.0573 / 1.0567	1.0807 / 1.0810	1.0807 / 1.0804	1.0672 / 1.0678	1.12500 / 1.12488	1.11560 / 1.11572		1.1250 / 1.1256	1.0844 / 1.0847	1.1164 / 1.1158	1.0893 / 1.0890	1.0893 / 1.0896	1.05700 / 1.05712	1.06580 / 1.06568	3B		
1 1/8-18 or 1.125-18	UNEF	2A	1.0875 / 1.0872	1.0634 / 1.0629	1.0828 / 1.0831	1.0828 / 1.0825	1.0708 / 1.0713	1.12360 / 1.12348	1.11580 / 1.11592		1.1250 / 1.1255	1.0889 / 1.0892	1.1192 / 1.1187	1.0951 / 1.0948	1.0951 / 1.0954	1.06500 / 1.06512	1.07800 / 1.07788	2B	UNEF	1 1/8-18 or 1.125-18
		3A	1.0889 / 1.0886	1.0648 / 1.0643	1.0853 / 1.0856	1.0853 / 1.0850	1.0733 / 1.0738	1.12500 / 1.12488	1.11630 / 1.11642		1.1250 / 1.1255	1.0889 / 1.0892	1.1176 / 1.1171	1.0935 / 1.0932	1.0935 / 1.0938	1.06500 / 1.06512	1.07300 / 1.07288	3B		
1 1/8-20 or 1.125-20	UN	2A	1.0911 / 1.0908	1.0694 / 1.0689	1.0866 / 1.0869	1.0866 / 1.0863	1.0758 / 1.0763	1.12369 / 1.12348	1.11550 / 1.11562		1.1250 / 1.1255	1.0925 / 1.0928	1.1201 / 1.1196	1.0984 / 1.0981	1.0984 / 1.0987	1.07100 / 1.07112	1.08200 / 1.08188	2B	UN	1 1/8-20 or 1.125-20
		3A	1.0925 / 1.0922	1.0708 / 1.0703	1.0891 / 1.0894	1.0891 / 1.0888	1.0783 / 1.0788	1.12500 / 1.12488	1.11690 / 1.11702		1.1250 / 1.1255	1.0925 / 1.0928	1.1186 / 1.1181	1.0969 / 1.0966	1.0969 / 1.0972	1.07100 / 1.07112	1.07870 / 1.07858	3B		

Thread size designations (columns, left to right):

1⅛-28 or 1.125-28	1¹³⁄₁₆-8 or 1.875-8	1¹³⁄₁₆-12 or 1.875-12	1¹³⁄₁₆-16 or 1.875-16	1¹³⁄₁₆-18 or 1.875-18	1¹³⁄₁₆-20 or 1.875-20	1¹³⁄₁₆-28 or 1.875-28	1¼-7 or 1.250-7	1¼-8 or 1.250-8	1¼-12 or 1.250-12	1¼-16 or 1.250-16	1¼-18 or 1.250-18	1¼-20 or 1.250-20	1¼-28 or 1.250-28	1⁵⁄₁₆-8 or 1.3125-8
UN	UN	UN	UN	UNEF	UN	UN	UNC	UN	UNF	UN	UNEF	UN	UN	UN
2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	1B / 2B / 3B	2B / 3B	1B / 2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B

Internal thread data (Minor dia., Pitch dia., Major dia.):

1.09500 1.09488 1.09260 1.09248	1.07700 1.07688 1.06720 1.06708	1.11500 1.11488 1.10730 1.10718	1.13400 1.13388 1.12830 1.12818	1.14000 1.13988 1.13550 1.13538	1.14500 1.14488 1.14120 1.14108	1.15700 1.15688 1.15510 1.15498	1.12300 1.12288 1.12288 1.11250 1.11238	1.14000 1.13988 1.12970 1.12958	1.17500 1.17788 1.17788 1.16980 1.16968	1.19600 1.19588 1.19080 1.19068	1.20300 1.20288 1.19800 1.19788	1.20700 1.20688 1.20370 1.20358	1.22000 1.21988 1.21760 1.21748	1.20200 1.20188 1.19220 1.19208

External thread data (Major dia., Pitch dia., Minor dia.):

1.06690 1.06690 1.06690 1.06612	1.05200 1.05212 1.05200 1.05212	1.09700 1.09712 1.09700 1.09712	1.12000 1.12012 1.12000 1.12012	1.12700 1.12712 1.12700 1.12712	1.13300 1.13312 1.13300 1.13312	1.14900 1.14912 1.14900 1.14912	1.09500 1.09512 1.09500 1.09500 1.09512	1.11500 1.11512 1.11500 1.11512	1.16000 1.16012 1.16000 1.16000 1.16012	1.18200 1.18212 1.18200 1.18212	1.19000 1.19012 1.19000 1.19012	1.19600 1.19612 1.19600 1.19612	1.21100 1.21112 1.21100 1.21112	1.17700 1.17712 1.17700 1.17712

2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	1A / 2A / 3A	2A / 3A	1A / 2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A
UN	UN	UN	UN	UNEF	UN	UN	UNC	UN	UNF	UN	UNEF	UN	UN	UN

| 1⅛-28 or 1.125-28 | 1¹³⁄₁₆-8 or 1.875-8 | 1¹³⁄₁₆-12 or 1.875-12 | 1¹³⁄₁₆-16 or 1.875-16 | 1¹³⁄₁₆-18 or 1.875-18 | 1¹³⁄₁₆-20 or 1.875-20 | 1¹³⁄₁₆-28 or 1.875-28 | 1¼-7 or 1.250-7 | 1¼-8 or 1.250-8 | 1¼-12 or 1.250-12 | 1¼-16 or 1.250-16 | 1¼-18 or 1.250-18 | 1¼-20 or 1.250-20 | 1¼-28 or 1.250-28 | 1⁵⁄₁₆-8 or 1.3125-8 |

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TABLE III.12.—*Gages for standard thread series, Unified screw threads*— Continued

			Gages for external threads								Gages for internal threads										
			X thread ring gages		LO, classes 1A and 2A NOT GO, class 3A			Z plain ring gages for major diameter			X thread plug gages		III			Z plain plug gages for minor diameter				
			GO		Pitch diameter			GO	NOT GO		GO			Pitch diameter						
			Pitch diameter	Minor diameter	Plus tolerance gage	Minus tolerance gage	Minor diameter		Semifinished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Minus tolerance gage	Plus tolerance gage	GO	NOT GO			
Nominal size and threads per inch	Series designation	Class																Class	Series designation	Nominal size and threads per inch
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
1 5/16-12 or 1.3125-12	UN	2A	1.2567	1.2206	1.2509	1.2509	1.2329	1.31080	1.29940		1.3125	1.2584	1.3020	1.2659	1.2659	1.22200	1.24000	2B	UN	1 5/16-12 or 1.3125-12
			1.2564	1.2200	1.2512	1.2506	1.2335	1.31068	1.29952		1.3131	1.2587	1.3014	1.2656	1.2662	1.22212	1.23988			
		3A	1.2584	1.2223	1.2541	1.2541	1.2361	1.31250	1.30110		1.3125	1.2584	1.3001	1.2640	1.2640	1.22200	1.23230	3B		
			1.2581	1.2217	1.2544	1.2538	1.2367	1.31238	1.30122		1.3131	1.2587	1.2995	1.2637	1.2643	1.22212	1.23218			
1 5/16-16 or 1.3125-16	UN	2A	1.2704	1.2433	1.2653	1.2653	1.2518	1.31100	1.30160		1.3125	1.2719	1.3056	1.2785	1.2785	1.24500	1.25900	2B	UN	1 5/16-16 or 1.3125-16
			1.2701	1.2427	1.2656	1.2650	1.2524	1.31088	1.30172		1.3131	1.2722	1.3050	1.2782	1.2788	1.24512	1.25888			
		3A	1.2719	1.2448	1.2681	1.2681	1.2546	1.31250	1.30310		1.3125	1.2719	1.3040	1.2769	1.2769	1.24500	1.25330	3B		
			1.2716	1.2442	1.2684	1.2678	1.2552	1.31238	1.30322		1.3131	1.2722	1.3034	1.2766	1.2772	1.24512	1.25318			
1 5/16-18 or 1.3125-18	UNEF	2A	1.2749	1.2508	1.2700	1.2700	1.2580	1.31100	1.30230		1.3125	1.2764	1.3068	1.2827	1.2827	1.25200	1.26530	2B	UNEF	1 5/16-18 or 1.3125-18
			1.2746	1.2503	1.2703	1.2697	1.2585	1.31088	1.30242		1.3130	1.2767	1.3063	1.2824	1.2830	1.25212	1.26488			
		3A	1.2764	1.2523	1.2728	1.2728	1.2608	1.31250	1.30380		1.3125	1.2764	1.3052	1.2811	1.2811	1.25200	1.26050	3B		
			1.2761	1.2518	1.2731	1.2725	1.2613	1.31238	1.30392		1.3130	1.2767	1.3047	1.2808	1.2814	1.25212	1.26038			
1 5/16-20 or 1.3125-20	UN	2A	1.2786	1.2569	1.2739	1.2739	1.2631	1.31110	1.30300		1.3125	1.2800	1.3078	1.2861	1.2861	1.25800	1.27000	2B	UN	1 5/16-20 or 1.3125-20
			1.2783	1.2564	1.2742	1.2736	1.2636	1.31098	1.30312		1.3130	1.2803	1.3073	1.2858	1.2864	1.25812	1.26988			
		3A	1.2800	1.2583	1.2765	1.2765	1.2657	1.31250	1.30440		1.3125	1.2800	1.3062	1.2845	1.2845	1.25800	1.26620	3B		
			1.2797	1.2578	1.2768	1.2762	1.2662	1.31238	1.30452		1.3130	1.2803	1.3057	1.2842	1.2848	1.25812	1.26608			
1 5/16-28 or 1.3125-28	UN	2A	1.2881	1.2726	1.2840	1.2840	1.2763	1.31130	1.30480		1.3125	1.2893	1.3101	1.2946	1.2946	1.27400	1.28230	2B	UN	1 5/16-28 or 1.3125-28
			1.2878	1.2721	1.2843	1.2837	1.2768	1.31118	1.30492		1.3130	1.2896	1.3096	1.2943	1.2949	1.27412	1.28188			
		3A	1.2893	1.2738	1.2862	1.2862	1.2785	1.31250	1.30600		1.3125	1.2893	1.3088	1.2933	1.2933	1.27400	1.28110	3B		
			1.2890	1.2733	1.2865	1.2859	1.2790	1.31238	1.30612		1.3130	1.2896	1.3083	1.2930	1.2936	1.27412	1.27998			
1 3/8-6 or 1.375-6	UNC	1A	1.2643	1.1921	1.2523	1.2523	1.2162	1.37260	1.34530	1.34530	1.3759	1.2667	1.3544	1.2822	1.2822	1.19500	1.22500	1B	UNC	1 3/8-6 or 1.375-6
			1.2639	1.1913	1.2527	1.2519	1.2170	1.37248	1.34542	1.34542	1.3758	1.2671	1.3536	1.2818	1.2826	1.19512	1.22488			
		2A	1.2643	1.1921	1.2563	1.2563	1.2202	1.37260	1.35540		1.3759	1.2667	1.3493	1.2771	1.2771	1.19500	1.22500	2B		
			1.2639	1.1913	1.2567	1.2559	1.2210	1.37248	1.35552		1.3758	1.2671	1.3485	1.2767	1.2775	1.19512	1.22488			
		3A	1.2667	1.1945	1.2607	1.2607	1.2246	1.37510	1.35680		1.3750	1.2667	1.3467	1.2745	1.2745	1.19500	1.21463	3B		
			1.2663	1.1937	1.2611	1.2603	1.2254	1.37488	1.35692		1.3758	1.2671	1.3459	1.2741	1.2749	1.19512	1.21448			
1 3/8-8 or 1.375-8	UN	2A	1.2916	1.2375	1.2844	1.2844	1.2573	1.37280	1.35780		1.3750	1.2938	1.3572	1.3031	1.3031	1.24000	1.26530	2B	UN	1 3/8-8 or 1.375-8
			1.2912	1.2368	1.2848	1.2840	1.2589	1.37268	1.35792		1.3757	1.2942	1.3565	1.3027	1.3035	1.24012	1.26488			
		3A	1.2938	1.2397	1.2884	1.2884	1.2613	1.37510	1.36010		1.3750	1.2938	1.3549	1.3008	1.3008	1.24000	1.25470	3B		
			1.2934	1.2390	1.2888	1.2880	1.2620	1.37488	1.36012		1.3757	1.2942	1.3542	1.3004	1.3012	1.24012	1.25458			
1 3/8-12 or 1.375-12	UNF	1A	1.3190	1.2829	1.3096	1.3096	1.2916	1.37310	1.35590	1.35030	1.3750	1.3209	1.3693	1.3332	1.3332	1.28500	1.30300	1B	UNF	1 3/8-12 or 1.375-12
			1.3187	1.2823	1.3099	1.3093	1.2922	1.37298	1.35602	1.35042	1.3756	1.3212	1.3687	1.3329	1.3335	1.28512	1.30288			
		2A	1.3190	1.2829	1.3127	1.3127	1.2947	1.37310	1.36170		1.3750	1.3209	1.3652	1.3291	1.3291	1.28500	1.30300	2B		
			1.3187	1.2823	1.3130	1.3124	1.2953	1.37298	1.36182		1.3756	1.3212	1.3646	1.3288	1.3294	1.28512	1.30288			
		3A	1.3209	1.2848	1.3162	1.3162	1.2982	1.37500	1.36360		1.3750	1.3209	1.3631	1.3270	1.3270	1.28500	1.29480	3B		
			1.3206	1.2842	1.3165	1.3159	1.2988	1.37488	1.36372		1.3756	1.3212	1.3625	1.3267	1.3273	1.28512	1.29468			
1 3/8-16 or 1.375-16	UN	2A	1.3329	1.3058	1.3278	1.3278	1.3143	1.37350	1.36410		1.3750	1.3344	1.3681	1.3410	1.3410	1.30700	1.32100	2B	UN	1 3/8-16 or 1.375-16
			1.3326	1.3052	1.3281	1.3275	1.3149	1.37338	1.36422		1.3756	1.3347	1.3675	1.3407	1.3413	1.30712	1.32088			
		3A	1.3344	1.3073	1.3306	1.3306	1.3171	1.37500	1.36560		1.3750	1.3344	1.3665	1.3394	1.3394	1.30700	1.31550	3B		
			1.3341	1.3067	1.3309	1.3303	1.3177	1.37488	1.36572		1.3756	1.3347	1.3659	1.3391	1.3397	1.30712	1.31568			

This page contains a dense screw-thread dimension table (rotated to landscape). The column headers appear on a preceding page; the 15 numeric dimension columns are shown here as D1–D15. Each size block has four data lines (internal classes 2B/3B on the left, external classes 2A/3A on the right; sizes 1½–6 (UNC) and 1½–12 (UNF) also carry class 1B/1A). Dashes (----) indicate no value given.

Size	Series	Int. Class	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	Ext. Class
1⅜–18 or 1.375–18	UNEF	2B	1.32800	1.31500	1.3452	1.3452	1.3693	1.3389	1.3750	----	1.36480	1.37350	1.3205	1.3325	1.3325	1.3133	1.3374	2A
		2B	1.32788	1.31500	1.3455	1.3449	1.3688	1.3392	1.3750	----	1.36492	1.37338	1.3210	1.3322	1.3328	1.3128	1.3371	2A
		3B	1.32800	1.31500	1.3436	1.3436	1.3677	1.3389	1.3750	----	1.36630	1.37500	1.3233	1.3353	1.3353	1.3148	1.3389	3A
		3B	1.32288	1.31512	1.3489	1.3433	1.3672	1.3392	1.3755	----	1.36642	1.37488	1.3238	1.3350	1.3356	1.3143	1.3386	3A
1⅜–20 or 1.375–20	UN	2B	1.33200	1.32100	1.3486	1.3486	1.3703	1.3425	1.3750	----	1.36550	1.37360	1.3256	1.3364	1.3364	1.3194	1.3411	2A
		2B	1.33188	1.32112	1.3489	1.3483	1.3698	1.3428	1.3755	----	1.36562	1.37348	1.3261	1.3361	1.3367	1.3189	1.3408	2A
		3B	1.32570	1.32100	1.3470	1.3470	1.3687	1.3425	1.3750	----	1.36690	1.37500	1.3282	1.3390	1.3390	1.3208	1.3425	3A
		3B	1.32558	1.32112	1.3473	1.3467	1.3682	1.3428	1.3755	----	1.36702	1.37488	1.3287	1.3387	1.3393	1.3203	1.3422	3A
1⅜–28 or 1.375–28	UN	2B	1.34500	1.33612	1.3571	1.3571	1.3721	1.3521	1.3750	----	1.36730	1.37380	1.3388	1.3465	1.3465	1.3351	1.3506	2A
		2B	1.34488	1.33612	1.3574	1.3568	1.3721	1.3521	1.3755	----	1.36742	1.37368	1.3393	1.3462	1.3468	1.3346	1.3503	2A
		3B	1.34260	1.33600	1.3558	1.3558	1.3713	1.3518	1.3750	----	1.36830	1.37500	1.3410	1.3487	1.3487	1.3363	1.3515	3A
		3B	1.34248	1.33612	1.3561	1.3555	1.3708	1.3521	1.3755	----	1.36862	1.37488	1.3415	1.3484	1.3490	1.3358	1.3515	3A
1⁷⁄₁₆–6 or 1.4375–6	UN	2B	1.28800	1.25700	1.3396	1.3396	1.4118	1.3292	1.4375	----	1.41690	1.43510	1.2827	1.3188	1.3188	1.2546	1.3208	2A
		2B	1.28788	1.25712	1.3400	1.3392	1.4110	1.3296	1.4383	----	1.41702	1.43498	1.2835	1.3184	1.3192	1.2538	1.3204	2A
		3B	1.27710	1.25700	1.3370	1.3370	1.4092	1.3292	1.4375	----	1.41930	1.43750	1.2871	1.3232	1.3232	1.2570	1.3292	3A
		3B	1.27698	1.25712	1.3374	1.3366	1.4084	1.3296	1.4383	----	1.41942	1.43738	1.2879	1.3228	1.3236	1.2562	1.3288	3A
1⁷⁄₁₆–8 or 1.4375–8	UN	2B	1.32700	1.30200	1.3657	1.3657	1.4198	1.3563	1.4375	----	1.42030	1.43530	1.3198	1.3469	1.3469	1.3000	1.3541	2A
		2B	1.32688	1.30212	1.3661	1.3653	1.4191	1.3567	1.4382	----	1.42042	1.43518	1.3205	1.3465	1.3473	1.2993	1.3537	2A
		3B	1.31720	1.30200	1.3634	1.3634	1.4175	1.3563	1.4375	----	1.42250	1.43750	1.3238	1.3509	1.3509	1.3022	1.3563	3A
		3B	1.31708	1.30212	1.3638	1.3630	1.4168	1.3567	1.4382	----	1.42262	1.43738	1.3245	1.3505	1.3513	1.3015	1.3559	3A
1⁷⁄₁₆–12 or 1.4375–12	UN	2B	1.36500	1.34700	1.3910	1.3910	1.4271	1.3834	1.4375	----	1.42430	1.43570	1.3577	1.3757	1.3757	1.3455	1.3816	2A
		2B	1.36488	1.34712	1.3913	1.3907	1.4265	1.3837	1.4381	----	1.42442	1.43558	1.3583	1.3754	1.3760	1.3449	1.3813	2A
		3B	1.35730	1.34700	1.3891	1.3891	1.4252	1.3834	1.4375	----	1.42610	1.43750	1.3610	1.3790	1.3790	1.3473	1.3834	3A
		3B	1.35718	1.34712	1.3894	1.3888	1.4246	1.3837	1.4381	----	1.42622	1.43738	1.3616	1.3787	1.3793	1.3467	1.3831	3A
1⁷⁄₁₆–16 or 1.4375–16	UN	2B	1.38400	1.37000	1.4037	1.4037	1.4308	1.3969	1.4375	----	1.42650	1.43590	1.3766	1.3901	1.3901	1.3682	1.3953	2A
		2B	1.38388	1.37012	1.4040	1.4034	1.4302	1.3972	1.4381	----	1.42662	1.43578	1.3772	1.3898	1.3904	1.3676	1.3950	2A
		3B	1.37830	1.37000	1.4020	1.4020	1.4291	1.3969	1.4375	----	1.42810	1.43750	1.3795	1.3930	1.3930	1.3698	1.3969	3A
		3B	1.37818	1.37012	1.4023	1.4017	1.4285	1.3972	1.4381	----	1.42822	1.43738	1.3801	1.3927	1.3933	1.3692	1.3966	3A
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2B	1.39000	1.37700	1.4079	1.4079	1.4320	1.4014	1.4375	----	1.42730	1.43600	1.3829	1.3949	1.3949	1.3758	1.3999	2A
		2B	1.38988	1.37712	1.4082	1.4076	1.4315	1.4017	1.4380	----	1.42742	1.43588	1.3834	1.3946	1.3952	1.3753	1.3996	2A
		3B	1.38550	1.37700	1.4062	1.4062	1.4303	1.4014	1.4375	----	1.42880	1.43750	1.3857	1.3977	1.3977	1.3773	1.4014	3A
		3B	1.38538	1.37712	1.4065	1.4059	1.4298	1.4017	1.4380	----	1.42892	1.43738	1.3862	1.3974	1.3980	1.3768	1.4011	3A
1⁷⁄₁₆–20 or 1.4375–20	UN	2B	1.39500	1.38300	1.4112	1.4112	1.4329	1.4050	1.4375	----	1.42800	1.43620	1.3880	1.3988	1.3988	1.3819	1.4036	2A
		2B	1.39488	1.38312	1.4115	1.4109	1.4324	1.4053	1.4380	----	1.42812	1.43608	1.3885	1.3985	1.3991	1.3814	1.4033	2A
		3B	1.39120	1.38300	1.4096	1.4096	1.4313	1.4050	1.4375	----	1.42940	1.43750	1.3906	1.4014	1.4014	1.3833	1.4050	3A
		3B	1.39108	1.38312	1.4099	1.4093	1.4308	1.4053	1.4380	----	1.42952	1.43738	1.3911	1.4011	1.4017	1.3828	1.4047	3A
1⁷⁄₁₆–28 or 1.4375–28	UN	2B	1.40700	1.39000	1.4198	1.4198	1.4353	1.4143	1.4375	1.47030	1.42970	1.43620	1.4011	1.4088	1.4088	1.3975	1.4130	2A
		2B	1.40688	1.39012	1.4201	1.4195	1.4348	1.4146	1.4380	1.47042	1.42982	1.43608	1.4016	1.4085	1.4091	1.3970	1.4127	2A
		3B	1.40510	1.39000	1.4184	1.4184	1.4339	1.4143	1.4375	----	1.43100	1.43750	1.4035	1.4112	1.4112	1.3988	1.4143	3A
		3B	1.40498	1.39012	1.4187	1.4181	1.4334	1.4146	1.4380	----	1.43112	1.43738	1.4040	1.4109	1.4115	1.3983	1.4149	3A
1½–6 or 1.500–6	UNC	1B/2B	1.35000	1.32000	1.4283	1.4283	1.4824	1.3917	1.5000	----	1.48290	1.49810	1.4164	1.4093	1.4093	1.3625	1.4166	1A/2A
		2B	1.34988	1.32012	1.4287	1.4279	1.4817	1.3921	1.5008	----	1.48292	1.49798	1.4170	1.4089	1.4097	1.3618	1.4162	2A
		3B	1.33940	1.32000	1.4259	1.4259	1.4800	1.3917	1.5000	----	1.48500	1.50000	1.4202	1.4133	1.4133	1.3647	1.4188	3A
		3B	1.33944	1.32012	1.4263	1.4255	1.4793	1.3921	1.5008	----	1.48512	1.49988	1.4237	1.4129	1.4137	1.3640	1.4184	3A
1½–8 or 1.500–8	UN	2B	1.39000	1.36500	1.4584	1.4584	1.4933	1.4188	1.5000	1.47530	1.48900	1.49850	1.4164	1.4526	1.4526	1.4307	1.4578	2A
		2B	1.38988	1.36512	1.4587	1.4581	1.4927	1.4192	1.5006	1.47542	1.48912	1.49838	1.4170	1.4523	1.4529	1.4301	1.4575	2A
		3B	1.37970	1.36500	1.4542	1.4542	1.4916	1.4188	1.5000	----	1.49060	1.50000	1.4202	1.4555	1.4555	1.4323	1.4594	3A
		3B	1.37958	1.36512	1.4525	1.4519	1.4910	1.4192	1.5006	----	1.49072	1.49988	1.4237	1.4552	1.4558	1.4317	1.4591	3A
1½–12 or 1.500–12	UNF	1B/2B	1.42800	1.41000	1.4662	1.4662	1.4945	1.4459	1.5000	----	1.48980	1.49850	1.4391	1.4574	1.4574	1.4383	1.4621	1A/2A
		2B	1.42788	1.41012	1.4665	1.4659	1.4939	1.4462	1.5006	----	1.48992	1.49838	1.4397	1.4571	1.4577	1.4378	1.4621	2A
		3B	1.42290	1.41000	1.4645	1.4645	1.4903	1.4459	1.5000	----	1.49130	1.50000	1.4420	1.4602	1.4602	1.4398	1.4639	3A
		3B	1.41968	1.41012	1.4648	1.4642	1.4897	1.4462	1.5006	----	1.49142	1.49988	1.4426	1.4599	1.4605	1.4393	1.4636	3A
1½–16 or 1.500–16	UN	2B	1.44600	1.43200	1.4704	1.4704	1.4945	1.4594	1.5000	----	1.48900	1.49850	1.4454	1.4574	1.4574	1.4307	1.4578	2A
		2B	1.44588	1.43212	1.4707	1.4701	1.4940	1.4597	1.5006	----	1.48912	1.49838	1.4459	1.4571	1.4577	1.4301	1.4575	2A
		3B	1.44080	1.43200	1.4687	1.4687	1.4928	1.4594	1.5000	----	1.49060	1.50000	1.4482	1.4602	1.4602	1.4323	1.4594	3A
		3B	1.44068	1.43212	1.4690	1.4684	1.4923	1.4597	1.5006	----	1.49072	1.49988	1.4487	1.4599	1.4605	1.4317	1.4591	3A
1½–18 or 1.500–18	UNEF	2B	1.45200	1.44000	1.4704	1.4704	1.4945	1.4639	1.5000	----	1.48980	1.49850	1.4454	1.4574	1.4574	1.4383	1.4621	2A
		2B	1.45188	1.44012	1.4707	1.4701	1.4940	1.4642	1.5005	1.47542	1.48992	1.49838	1.4459	1.4571	1.4577	1.4378	1.4621	2A
		3B	1.44800	1.44000	1.4687	1.4687	1.4928	1.4639	1.5000	----	1.49130	1.50000	1.4482	1.4602	1.4602	1.4398	1.4639	3A
		3B	1.44788	1.44012	1.4690	1.4684	1.4923	1.4642	1.5005	----	1.49142	1.49988	1.4487	1.4599	1.4605	1.4393	1.4636	3A

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

1 Nominal size and threads per inch	2 Series designation	3 Class	4 X ring GO Pitch diam.	5 X ring GO Minor diam.	6 Pitch diam. Plus tol. gage	7 Pitch diam. Minus tol. gage	8 Minor diam.	9 Z ring GO	10 NOT GO Semifinished	11 NOT GO Unfinished hot-rolled	12 X plug GO Major diam.	13 X plug GO Pitch diam.	14 III Major diam.	15 III PD Minus tol. gage	16 III PD Plus tol. gage	17 Z plug GO	18 Z plug NOT GO	19 Class	20 Series desig.	21 Nominal size and threads per inch
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
1½–20 or 1.500-20	UN	2A	1.4661	1.4444	1.4613	1.4613	1.4505	1.49860	1.49050		1.5000	1.4675	1.4954	1.4737	1.4737	1.44600	1.45700	2B	UN	1½–20 or 1.500-20
		2A	1.4658	1.4439	1.4616	1.4610	1.4510	1.49848	1.49062		1.5005	1.4678	1.4949	1.4734	1.4740	1.44612	1.45688			
		3A	1.4675	1.4458	1.4639	1.4639	1.4531	1.50000	1.49190		1.5000	1.4675	1.4938	1.4721	1.4721	1.44600	1.45370	3B		
		3A	1.4672	1.4453	1.4642	1.4636	1.4536	1.49988	1.49202		1.5005	1.4678	1.4933	1.4718	1.4724	1.44612	1.45358			
1½–28 or 1.500-28	UN	2A	1.4755	1.4600	1.4713	1.4713	1.4636	1.49870	1.49220		1.5005	1.4768	1.4978	1.4823	1.4823	1.46100	1.47000	2B	UN	1½–28 or 1.500-28
		2A	1.4752	1.4595	1.4716	1.4710	1.4641	1.49858	1.49232		1.5005	1.4771	1.4973	1.4820	1.4826	1.46112	1.46988			
		3A	1.4768	1.4613	1.4737	1.4737	1.4660	1.50000	1.49350		1.5000	1.4768	1.4964	1.4809	1.4809	1.46100	1.46760	3B		
		3A	1.4765	1.4608	1.4740	1.4734	1.4665	1.49988	1.49362		1.5005	1.4771	1.4959	1.4806	1.4812	1.46112	1.46748			
1 9/16–6 or 1.5625-6	UN	2A	1.4518	1.3796	1.4436	1.4436	1.4075	1.56010	1.54190		1.5625	1.4542	1.5370	1.4648	1.4648	1.38216	1.41300	2B	UN	1 9/16–6 or 1.5625-6
		2A	1.4513	1.3788	1.4441	1.4431	1.4083	1.55994	1.54206		1.5633	1.4547	1.5362	1.4643	1.4653	1.38216	1.41284			
		3A	1.4542	1.3820	1.4481	1.4481	1.4120	1.56250	1.54430		1.5625	1.4542	1.5344	1.4622	1.4622	1.38200	1.40210	3B		
		3A	1.4537	1.3812	1.4486	1.4476	1.4128	1.56234	1.54446		1.5633	1.4547	1.5336	1.4617	1.4627	1.38216	1.40194			
1 9/16–8 or 1.5625-8	UN	2A	1.4791	1.4250	1.4717	1.4717	1.4446	1.56030	1.54530		1.5625	1.4813	1.5450	1.4909	1.4909	1.42700	1.45200	2B	UN	1 9/16–8 or 1.5625-8
		2A	1.4786	1.4243	1.4722	1.4712	1.4453	1.56014	1.54546		1.5632	1.4818	1.5443	1.4904	1.4914	1.42716	1.45184			
		3A	1.4813	1.4272	1.4758	1.4758	1.4487	1.56250	1.54750		1.5625	1.4813	1.5426	1.4885	1.4885	1.42700	1.44220	3B		
		3A	1.4808	1.4265	1.4763	1.4753	1.4494	1.56234	1.54766		1.5632	1.4818	1.5419	1.4880	1.4890	1.42716	1.44204			
1 9/16–12 or 1.5625-12	UN	2A	1.5066	1.4705	1.5007	1.5007	1.4827	1.56070	1.54930		1.5625	1.5084	1.5521	1.5160	1.5160	1.47200	1.49000	2B	UN	1 9/16–12 or 1.5625-12
		2A	1.5062	1.4699	1.5011	1.5003	1.4833	1.56054	1.54946		1.5631	1.5088	1.5515	1.5156	1.5164	1.47216	1.48984			
		3A	1.5084	1.4723	1.5040	1.5040	1.4860	1.56250	1.55110		1.5625	1.5084	1.5502	1.5141	1.5141	1.47200	1.48230	3B		
		3A	1.5080	1.4717	1.5044	1.5036	1.4866	1.56234	1.55126		1.5631	1.5088	1.5496	1.5137	1.5145	1.47216	1.48214			
1 9/16–16 or 1.5625-16	UN	2A	1.5203	1.4932	1.5151	1.5151	1.5016	1.56090	1.55150		1.5625	1.5219	1.5558	1.5287	1.5287	1.49500	1.50900	2B	UN	1 9/16–16 or 1.5625-16
		2A	1.5199	1.4926	1.5155	1.5147	1.5022	1.56074	1.55166		1.5631	1.5223	1.5552	1.5283	1.5291	1.49516	1.50884			
		3A	1.5219	1.4948	1.5180	1.5180	1.5045	1.56250	1.55310		1.5625	1.5219	1.5541	1.5270	1.5270	1.49500	1.50330	3B		
		3A	1.5215	1.4942	1.5184	1.5176	1.5051	1.56234	1.55326		1.5631	1.5223	1.5535	1.5266	1.5274	1.49516	1.50314			
1 9/16–18 or 1.5625-18	UNEF	2A	1.5249	1.5008	1.5199	1.5199	1.5079	1.56100	1.55230		1.5625	1.5264	1.5570	1.5329	1.5329	1.50200	1.51500	2B	UNEF	1 9/16–18 or 1.5625-18
		2A	1.5245	1.5003	1.5203	1.5195	1.5084	1.56084	1.55246		1.5630	1.5268	1.5565	1.5325	1.5333	1.50216	1.51484			
		3A	1.5264	1.5023	1.5227	1.5227	1.5107	1.56250	1.55380		1.5625	1.5264	1.5553	1.5312	1.5312	1.50200	1.51050	3B		
		3A	1.5260	1.5018	1.5231	1.5223	1.5112	1.56234	1.55396		1.5630	1.5268	1.5548	1.5308	1.5316	1.50216	1.51034			
1 9/16–20 or 1.5625-20	UN	2A	1.5286	1.5069	1.5238	1.5238	1.5130	1.56110	1.55300		1.5625	1.5300	1.5579	1.5362	1.5362	1.50800	1.52000	2B	UN	1 9/16–20 or 1.5625-20
		2A	1.5282	1.5064	1.5242	1.5234	1.5135	1.56094	1.55316		1.5630	1.5304	1.5574	1.5358	1.5366	1.50816	1.51984			
		3A	1.5300	1.5083	1.5264	1.5264	1.5156	1.56250	1.55440		1.5625	1.5300	1.5563	1.5346	1.5346	1.50800	1.51620	3B		
		3A	1.5296	1.5078	1.5268	1.5260	1.5161	1.56234	1.55456		1.5630	1.5304	1.5558	1.5342	1.5350	1.50816	1.51604			
1 5/8–6 or 1.625-6	UN	2A	1.5142	1.4420	1.5060	1.5060	1.4699	1.62280	1.60430	1.60030	1.6250	1.5167	1.5996	1.5274	1.5274	1.44500	1.47500	2B	UN	1 5/8–6 or 1.625-6
		2A	1.5137	1.4412	1.5065	1.5055	1.4707	1.62264	1.60446	1.60046	1.6258	1.5172	1.5988	1.5269	1.5279	1.44516	1.47484			
		3A	1.5167	1.4445	1.5105	1.5105	1.4744	1.62500	1.60680		1.6250	1.5167	1.5969	1.5247	1.5247	1.44500	1.46460	3B		
		3A	1.5162	1.4437	1.5110	1.5100	1.4752	1.62484	1.60696		1.6258	1.5172	1.5961	1.5242	1.5252	1.44516	1.46444			
1 5/8–8 or 1.625-8	UN	2A	1.5416	1.4875	1.5342	1.5342	1.5071	1.62280	1.60780		1.6250	1.5438	1.6076	1.5535	1.5535	1.49000	1.51500	2B	UN	1 5/8–8 or 1.625-8
		2A	1.5411	1.4868	1.5347	1.5337	1.5078	1.62264	1.60796		1.6257	1.5443	1.6069	1.5530	1.5540	1.49016	1.51484			
		3A	1.5438	1.4897	1.5382	1.5382	1.5111	1.62500	1.61000		1.6250	1.5438	1.6051	1.5510	1.5510	1.49000	1.50470	3B		
		3A	1.5433	1.4890	1.5387	1.5377	1.5118	1.62484	1.61016		1.6257	1.5443	1.6044	1.5505	1.5515	1.49016	1.50454			

This page is a dense numerical screw-thread dimension table (National/Unified thread standards). Thread designations run as rows down the left and right margins; the internal-thread classes (2B, 3B, and in two cases 1B/UNC) are keyed at the top and the external-thread classes (2A, 3A) at the bottom, sharing the dimensional columns.

Thread size	Class (top)	Class (bottom)
1⁵⁄₈–12 or 1.625–12	UN — 2B, 3B	2A, 3A — UN
1⁵⁄₈–16 or 1.625–16	UN — 2B, 3B	2A, 3A — UN
1⁵⁄₈–18 or 1.625–18	UNEF — 2B, 3B	2A, 3A — UNEF
1⁵⁄₈–20 or 1.625–20	UN — 2B, 3B	2A, 3A — UN
1¹¹⁄₁₆–6 or 1.6875–6	UN — 2B, 3B	2A, 3A — UN
1¹¹⁄₁₆–8 or 1.6875–8	UN — 2B, 3B	2A, 3A — UN
1¹¹⁄₁₆–12 or 1.6875–12	UN — 2B, 3B	2A, 3A — UN
1¹¹⁄₁₆–16 or 1.6875–16	UN — 2B, 3B	2A, 3A — UN
1¹¹⁄₁₆–18 or 1.6875–18	UNEF — 2B, 3B	2A, 3A — UNEF
1¹¹⁄₁₆–20 or 1.6875–20	UN — 2B, 3B	2A, 3A — UN
1³⁄₄–5 or 1.750–5	UNC — 1B, 2B, 3B	1A, 2A, 3A — UNC
1³⁄₄–6 or 1.750–6	UN — 2B, 3B	2A, 3A — UN
1³⁄₄–8 or 1.750–8	UN — 2B, 3B	2A, 3A — UN
1³⁄₄–12 or 1.750–12	UN — 2B, 3B	2A, 3A — UN
1³⁄₄–16 or 1.750–16	UN — 2B, 3B	2A, 3A — UN

First dimensional column group (four values per size):

Thread size	values
1.625–12	1.55300, 1.55284, 1.54480, 1.54464
1.625–16	1.57100, 1.57084, 1.56580, 1.56564
1.625–18	1.57800, 1.57784, 1.57300, 1.57284
1.625–20	1.58200, 1.58184, 1.57870, 1.57854
1.6875–6	1.53800, 1.53784, 1.52710, 1.52694
1.6875–8	1.57700, 1.57684, 1.56720, 1.56704
1.6875–12	1.61500, 1.61484, 1.60730, 1.60714
1.6875–16	1.63400, 1.63384, 1.62830, 1.62814
1.6875–18	1.64000, 1.63984, 1.63550, 1.63534
1.6875–20	1.64500, 1.64484, 1.64120, 1.64104
1.750–5	1.56800, 1.56784, 1.56800, 1.56784, 1.55750, 1.55734
1.750–6	1.60000, 1.59984, 1.58960, 1.58944
1.750–8	1.64000, 1.63984, 1.62970, 1.62954
1.750–12	1.67800, 1.67784, 1.66980, 1.66964
1.750–16	1.69600, 1.69584, 1.69080, 1.69064

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TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads — X thread ring gages — GO Pitch diameter	GO Minor diameter	LO cl. 1A & 2A, NOT GO cl. 3A — Pitch diameter Plus tolerance gage	Pitch diameter Minus tolerance gage	Minor diameter	Z plain ring gages for major diameter — GO	NOT GO Semifinished	NOT GO Unfinished hot-rolled material	Gages for internal threads — X thread plug gages — GO Major diameter	GO Pitch diameter	III Major diameter	III Pitch diameter Minus tolerance gage	III Pitch diameter Plus tolerance gage	Z plain plug gages for minor diameter — GO	NOT GO	Class	Series designation	Nominal size and threads per inch
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
1¾-20 or 1.750-20	UN	2A	1.7160	1.6943	1.7112	1.7112	1.7004	1.74830	1.74040		1.7500	1.7175	1.7455	1.7238	1.7238	1.69600	1.70700	2B	UN	1¾-20 or 1.750-20
			1.7156	1.6938	1.7116	1.7108	1.7009	1.74834	1.74056		1.7505	1.7179	1.7450	1.7234	1.7242	1.69616	1.70684			
		3A	1.7175	1.6958	1.7139	1.7139	1.7031	1.75000	1.74190		1.7500	1.7175	1.7439	1.7222	1.7222	1.69600	1.70370	3B		
			1.7171	1.6953	1.7143	1.7135	1.7036	1.74984	1.74206		1.7505	1.7179	1.7434	1.7218	1.7226	1.69616	1.70354			
1¹³⁄₁₆-6 or 1.8125-6	UN	2A	1.7017	1.6295	1.6933	1.6933	1.6572	1.81000	1.79180		1.8125	1.7042	1.7873	1.7151	1.7151	1.63200	1.66300	2B	UN	1¹³⁄₁₆-6 or 1.8125-6
			1.7012	1.6287	1.6938	1.6928	1.6580	1.80984	1.79196		1.8133	1.7047	1.7865	1.7146	1.7156	1.63216	1.66284			
		3A	1.7042	1.6320	1.6979	1.6979	1.6618	1.81250	1.79430		1.8125	1.7042	1.7846	1.7124	1.7124	1.63200	1.65210	3B		
			1.7037	1.6312	1.6984	1.6974	1.6626	1.81234	1.79446		1.8133	1.7047	1.7838	1.7119	1.7129	1.63216	1.65194			
1¹³⁄₁₆-8 or 1.8125-8	UN	2A	1.7290	1.6749	1.7214	1.7214	1.6943	1.81020	1.79520		1.8125	1.7313	1.7953	1.7412	1.7412	1.67700	1.70200	2B	UN	1¹³⁄₁₆-8 or 1.8125-8
			1.7285	1.6742	1.7219	1.7209	1.6950	1.81004	1.79536		1.8132	1.7318	1.7946	1.7407	1.7417	1.67716	1.70184			
		3A	1.7313	1.6772	1.7256	1.7256	1.6985	1.81250	1.79750		1.8125	1.7313	1.7928	1.7387	1.7387	1.67700	1.69220	3B		
			1.7308	1.6765	1.7261	1.7251	1.6992	1.81234	1.79766		1.8132	1.7318	1.7921	1.7382	1.7392	1.67716	1.69204			
1¹³⁄₁₆-12 or 1.8125-12	UN	2A	1.7566	1.7205	1.7506	1.7506	1.7326	1.81070	1.79930		1.8125	1.7584	1.8023	1.7662	1.7662	1.72200	1.74000	2B	UN	1¹³⁄₁₆-12 or 1.8125-12
			1.7562	1.7199	1.7510	1.7502	1.7332	1.81054	1.79946		1.8131	1.7588	1.8017	1.7658	1.7666	1.72216	1.73984			
		3A	1.7584	1.7223	1.7539	1.7539	1.7359	1.81250	1.80110		1.8125	1.7584	1.8003	1.7642	1.7642	1.72200	1.73230	3B		
			1.7580	1.7217	1.7543	1.7535	1.7365	1.81234	1.80126		1.8131	1.7588	1.7997	1.7638	1.7646	1.72216	1.73214			
1¹³⁄₁₆-16 or 1.8125-16	UN	2A	1.7703	1.7432	1.7650	1.7650	1.7515	1.81090	1.80150		1.8125	1.7719	1.8059	1.7788	1.7788	1.74500	1.75900	2B	UN	1¹³⁄₁₆-16 or 1.8125-16
			1.7699	1.7426	1.7654	1.7646	1.7521	1.81074	1.80166		1.8131	1.7723	1.8053	1.7784	1.7792	1.74516	1.75884			
		3A	1.7719	1.7448	1.7679	1.7679	1.7544	1.81250	1.80310		1.8125	1.7719	1.8042	1.7771	1.7771	1.74500	1.75330	3B		
			1.7715	1.7442	1.7683	1.7675	1.7550	1.81234	1.80326		1.8131	1.7723	1.8036	1.7767	1.7775	1.74516	1.75314			
1¹³⁄₁₆-20 or 1.8125-20	UN	2A	1.7785	1.7568	1.7737	1.7737	1.7629	1.81100	1.80290		1.8125	1.7800	1.8080	1.7863	1.7863	1.75800	1.77000	2B	UN	1¹³⁄₁₆-20 or 1.8125-20
			1.7781	1.7563	1.7741	1.7733	1.7634	1.81084	1.80306		1.8130	1.7804	1.8075	1.7859	1.7867	1.75816	1.76984			
		3A	1.7800	1.7583	1.7764	1.7764	1.7656	1.81250	1.80440		1.8125	1.7800	1.8064	1.7847	1.7847	1.75800	1.76620	3B		
			1.7796	1.7578	1.7768	1.7760	1.7661	1.81234	1.80456		1.8130	1.7804	1.8059	1.7843	1.7851	1.75816	1.76604			
1⅞-6 or 1.875-6	UN	2A	1.7642	1.6920	1.7558	1.7558	1.7197	1.87270	1.85430	1.85020	1.8750	1.7667	1.8499	1.7777	1.7777	1.69500	1.72500	2B	UN	1⅞-6 or 1.875-6
			1.7637	1.6912	1.7563	1.7553	1.7205	1.87234	1.85446	1.85036	1.8758	1.7672	1.8491	1.7772	1.7782	1.69516	1.72484			
		3A	1.7667	1.6945	1.7604	1.7604	1.7243	1.87500	1.85680		1.8750	1.7667	1.8471	1.7749	1.7749	1.69500	1.71460	3B		
			1.7662	1.6937	1.7609	1.7599	1.7251	1.87484	1.85696		1.8758	1.7672	1.8463	1.7744	1.7754	1.69516	1.71444			
1⅞-8 or 1.875-8	UN	2A	1.7915	1.7374	1.7838	1.7838	1.7567	1.87270	1.85770		1.8750	1.7938	1.8579	1.8038	1.8038	1.74000	1.76500	2B	UN	1⅞-8 or 1.875-8
			1.7910	1.7367	1.7843	1.7833	1.7574	1.87254	1.85786		1.8757	1.7943	1.8572	1.8033	1.8043	1.74016	1.76484			
		3A	1.7938	1.7397	1.7881	1.7881	1.7610	1.87500	1.86000		1.8750	1.7938	1.8554	1.8013	1.8013	1.74000	1.75470	3B		
			1.7933	1.7390	1.7886	1.7876	1.7617	1.87484	1.86016		1.8757	1.7943	1.8547	1.8008	1.8018	1.74016	1.75454			
1⅞-12 or 1.875-12	UN	2A	1.8191	1.7830	1.8131	1.8131	1.7951	1.87320	1.86180		1.8750	1.8209	1.8649	1.8287	1.8287	1.78500	1.80300	2B	UN	1⅞-12 or 1.875-12
			1.8187	1.7824	1.8135	1.8127	1.7957	1.87304	1.86196		1.8756	1.8213	1.8642	1.8283	1.8291	1.78516	1.80284			
		3A	1.8209	1.7848	1.8164	1.8164	1.7984	1.87500	1.86360		1.8750	1.8209	1.8628	1.8267	1.8267	1.78500	1.79480	3B		
			1.8205	1.7842	1.8168	1.8160	1.7990	1.87484	1.86376		1.8756	1.8213	1.8622	1.8263	1.8271	1.78516	1.79464			
1⅞-16 or 1.875-16	UN	2A	1.8328	1.8057	1.8275	1.8275	1.8140	1.87340	1.86400		1.8750	1.8344	1.8684	1.8413	1.8413	1.82100	1.82100	2B	UN	1⅞-16 or 1.875-16
			1.8324	1.8051	1.8279	1.8271	1.8146	1.87324	1.86416		1.8756	1.8348	1.8678	1.8409	1.8417	1.80716	1.82084			
		3A	1.8344	1.8073	1.8304	1.8304	1.8169	1.87500	1.86560		1.8750	1.8344	1.8667	1.8392	1.8392	1.80700	1.81580	3B		
			1.8340	1.8067	1.8308	1.8300	1.8175	1.87484	1.86576		1.8756	1.8348	1.8661	1.8388	1.8400	1.80716	1.81564			

Screw-thread dimension table. Column headings (thread size / nominal) across the top, with class symbols UN (or UNC), 2B, 3B for internal threads in the upper portion and 2A, 3A, UN (or UNC) for external threads in the lower portion.

	1⅞–20 or 1.875–20	1¹⁵⁄₁₆–6 or 1.9375–6	1¹⁵⁄₁₆–8 or 1.9375–8	1¹⁵⁄₁₆–12 or 1.9375–12	1¹⁵⁄₁₆–16 or 1.9375–16	1¹⁵⁄₁₆–20 or 1.9375–20	2–4½ or 2.000–4.5	2–6 or 2.000–6	2–8 or 2.000–8	2–12 or 2.000–12	2–16 or 2.000–16	2–20 or 2.000–20	2⅛–6 or 2.125–6	2⅛–8 or 2.125–8	2⅛–12 or 2.125–12
Class (internal)	UN	UN	UN	UN	UN	UN	UNC	UN	UN	UN	UN	UN	UN	UN	UN
	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	1B / 2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B	2B / 3B
	1.83200 1.83184 1.82870 1.82854	1.78900 1.78784 1.77710 1.77694	1.82700 1.82684 1.81720 1.81704	1.86590 1.86484 1.85730 1.85714	1.88400 1.88384 1.87830 1.87814	1.89500 1.89484 1.89120 1.89104	1.79500 1.79484 1.79484 1.78594	1.85000 1.84984 1.83960 1.83944	1.89000 1.88984 1.87970 1.87954	1.92800 1.92784 1.91980 1.91964	1.94600 1.94584 1.94080 1.94064	1.95700 1.95684 1.95370 1.95354	1.97500 1.97484 1.96460 1.96444	2.01500 2.01484 2.00470 2.00454	2.05300 2.05284 2.04480 2.04464
	1.82100 1.82116 1.82100 1.82116	1.75700 1.75716 1.75700 1.75716	1.82210 1.80216 1.80290 1.80216	1.84700 1.84716 1.84700 1.84716	1.87000 1.87016 1.87000 1.87016	1.88300 1.88316 1.88300 1.88316	1.75900 1.75916 1.75900 1.75916	1.82000 1.82016 1.82000 1.82016	1.86500 1.86516 1.86500 1.86516	1.91000 1.91016 1.91000 1.91016	1.94600 1.94616 1.94600 1.94616	1.94500 1.94516 1.94500 1.94516	1.99000 1.99016 1.99000 1.99016	2.03500 2.03516 2.03500 2.03516	2.03500 2.03516 2.03500 2.03516
	1.8488 1.8492 1.8472 1.8476	1.8403 1.8408 1.8375 1.8380	1.8663 1.8668 1.8638 1.8643	1.8913 1.8917 1.8893 1.8897	1.9039 1.9043 1.9021 1.9025	1.9114 1.9118 1.9098 1.9102	1.8743 1.8748 1.8686 1.8655	1.9028 1.9033 1.9000 1.9005	1.9289 1.9294 1.9264 1.9269	1.9538 1.9542 1.9518 1.9522	1.9664 1.9668 1.9646 1.9650	1.9739 1.9743 1.9723 1.9727	2.0280 2.0285 2.0251 2.0256	2.0540 2.0545 2.0515 2.0520	2.0788 2.0792 2.0768 2.0772
	1.8488 1.8484 1.8472 1.8468	1.8403 1.8398 1.8375 1.8370	1.8663 1.8658 1.8638 1.8633	1.8913 1.8909 1.8893 1.8889	1.9039 1.9035 1.9021 1.9017	1.9114 1.9110 1.9098 1.9094	1.8743 1.8738 1.8676 1.8645	1.9028 1.9023 1.9000 1.8995	1.9289 1.9284 1.9264 1.9259	1.9538 1.9534 1.9518 1.9514	1.9664 1.9660 1.9646 1.9642	1.9739 1.9735 1.9723 1.9719	2.0280 2.0275 2.0251 2.0246	2.0540 2.0535 2.0515 2.0510	2.0788 2.0784 2.0768 2.0764
	1.8705 1.8700 1.8689 1.8684	1.9125 1.9117 1.9097 1.9089	1.9204 1.9197 1.9179 1.9172	1.9274 1.9268 1.9254 1.9248	1.9310 1.9304 1.9292 1.9286	1.9331 1.9326 1.9315 1.9310	1.9705 1.9697 1.9643 1.9612 1.9604	1.9750 1.9742 1.9722 1.9714	1.9830 1.9823 1.9805 1.9798	1.9899 1.9893 1.9879 1.9873	1.9956 1.9951 1.9940 1.9935	2.1002 2.0994 2.0973 2.0965	2.1149 2.1143 2.1129 2.1123	—	—
	1.8425 1.8429 1.8425 1.8429	1.8292 1.8297 1.8292 1.8297	1.8563 1.8568 1.8563 1.8568	1.8834 1.8838 1.8834 1.8838	1.8969 1.8973 1.8969 1.8973	1.9050 1.9054 1.9050 1.9054	1.8557 1.8562 1.8557 1.8557 1.8562	1.8917 1.8922 1.8917 1.8922	1.9188 1.9193 1.9188 1.9193	1.9459 1.9463 1.9459 1.9463	1.9594 1.9598 1.9594 1.9598	1.9675 1.9679 1.9675 1.9679	2.0167 2.0172 2.0167 2.0172	2.0438 2.0443 2.0438 2.0443	2.0709 2.0713 2.0709 2.0713
	1.8750 1.8755 1.8750 1.8755	1.9375 1.9383 1.9375 1.9383	1.9375 1.9382 1.9375 1.9382	1.9375 1.9381 1.9375 1.9381	1.9375 1.9381 1.9375 1.9381	1.9375 1.9380 1.9375 1.9380	2.0000 2.0008 2.0000 2.0008 2.0008	2.0000 2.0000 2.0000 2.0008	2.0000 2.0007 2.0000 2.0007	2.0000 2.0006 2.0000 2.0006	2.0000 2.0006 2.0000 2.0006	2.0000 2.0005 2.0000 2.0005	2.1250 2.1258 2.1250 2.1258	2.1250 2.1257 2.1250 2.1257	2.1250 2.1256 2.1250 2.1256
							1.96410 1.96426								2.10010 2.10026
	1.86540 1.86556 1.86690 1.86706	1.91670 1.91686 1.91930 1.91946	1.92120 1.92136 1.92250 1.92266	1.92430 1.92446 1.92610 1.92626	1.92650 1.92666 1.92810 1.92826	1.92790 1.92806 1.92940 1.92956	1.96410 1.96426 1.97510 1.97800 1.97816	1.97920 1.97936 1.98180 1.98196	1.98270 1.98286 1.98500 1.98516	1.98680 1.98696 1.98900 1.98916	1.98900 1.98916 1.99060 1.99076	1.99400 1.99056 1.99190 1.99206	2.10420 2.10436 2.10680 2.10696	2.10760 2.10776 2.11000 2.11016	2.11180 2.11196 2.11360 2.11376
							1.97520 1.97536								
	1.87350 1.87334 1.87500 1.87484	1.93490 1.93474 1.93750 1.93734	1.93520 1.93514 1.93759 1.93734	1.93570 1.93554 1.93750 1.93734	1.93590 1.93574 1.93750 1.93734	1.93600 1.93584 1.93750 1.93734	1.99710 1.99694 1.99710 1.99604 1.99984	1.99740 1.99724 2.00000 1.99984	1.99770 1.99754 2.00000 1.99984	1.99820 1.99804 2.00000 1.99984	1.99850 1.99834 2.00000 1.99984	1.99900 1.99884 2.00000 1.99984	2.12240 2.12224 2.12500 2.12484	2.12260 2.12244 2.12500 2.12484	2.12320 2.12304 2.12500 2.12484
	1.8254 1.8259 1.8281 1.8286	1.7820 1.7828 1.7867 1.7875	1.8192 1.8199 1.8234 1.8241	1.8575 1.8581 1.8609 1.8615	1.8764 1.8770 1.8794 1.8800	1.8878 1.8883 1.8905 1.8910	1.7904 1.7912 1.7932 1.7960 1.8005 1.8013	1.8444 1.8452 1.8492 1.8500	1.8816 1.8823 1.8859 1.8866	1.9200 1.9206 1.9234 1.9240	1.9389 1.9395 1.9419 1.9425	1.9503 1.9508 1.9530 1.9535	1.9693 1.9701 1.9741 1.9749	2.0064 2.0071 2.0108 2.0115	2.0450 2.0456 2.0484 2.0490
	1.8362 1.8358 1.8389 1.8385	1.8181 1.8176 1.8228 1.8223	1.8463 1.8458 1.8505 1.8590	1.8755 1.8751 1.8789 1.8785	1.8899 1.8895 1.8929 1.8925	1.8986 1.8982 1.9013 1.9009	1.8385 1.8380 1.8428 1.8481	1.8805 1.8800 1.8853 1.8848	1.9087 1.9082 1.9130 1.9125	1.9380 1.9376 1.9414 1.9410	1.9524 1.9520 1.9554 1.9550	1.9611 1.9607 1.9638 1.9634	2.0054 2.0049 2.0102 2.0097	2.0335 2.0330 2.0379 2.0374	2.0630 2.0626 2.0664 2.0660
	1.8362 1.8366 1.8389 1.8393	1.8181 1.8186 1.8228 1.8233	1.8463 1.8468 1.8505 1.8510	1.8755 1.8759 1.8789 1.8793	1.8899 1.8903 1.8929 1.8933	1.8986 1.8990 1.9013 1.9017	1.8385 1.8390 1.8433 1.8438 1.8486 1.8491	1.8805 1.8810 1.8853 1.8858	1.9087 1.9092 1.9130 1.9135	1.9380 1.9384 1.9414 1.9418	1.9524 1.9528 1.9554 1.9558	1.9611 1.9615 1.9638 1.9642	2.0054 2.0059 2.0102 2.0107	2.0335 2.0310 2.0379 2.0384	2.0630 2.0634 2.0664 2.0668
	1.8193 1.8188 1.8208 1.8203	1.7544 1.7536 1.7570 1.7562	1.7999 1.7992 1.8022 1.8015	1.8455 1.8449 1.8473 1.8467	1.8682 1.8676 1.8698 1.8692	1.8818 1.8813 1.8833 1.8828	1.7566 1.7558 1.7566 1.7558 1.7595 1.7587	1.8169 1.8161 1.8195 1.8187	1.8624 1.8617 1.8647 1.8640	1.9080 1.9074 1.9098 1.9092	1.9307 1.9301 1.9323 1.9317	1.9443 1.9438 1.9458 1.9453	1.9419 1.9411 1.9445 1.9437	1.9873 1.9866 1.9897 1.9890	2.0330 2.0324 2.0348 2.0342
	1.8410 1.8406 1.8425 1.8421	1.8266 1.8261 1.8292 1.8287	1.8540 1.8535 1.8563 1.8558	1.8816 1.8812 1.8834 1.8830	1.8953 1.8949 1.8969 1.8965	1.9035 1.9031 1.9050 1.9046	1.8528 1.8523 1.8528 1.8523 1.8557 1.8552	1.8891 1.8886 1.8917 1.8912	1.9165 1.9160 1.9188 1.9188	1.9441 1.9437 1.9459 1.9455	1.9578 1.9574 1.9594 1.9590	1.9660 1.9656 1.9675 1.9671	2.0141 2.0136 2.0167 2.0162	2.0414 2.0409 2.0438 2.0433	2.0691 2.0687 2.0709 2.0705
Class (external)	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	1A / 2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A	2A / 3A

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

			Gages for external threads								Gages for internal threads										
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter					
			GO		LO, classes 1A and 2A, NOT GO, class 3A			GO	NOT GO		GO		HI			GO	NOT GO				
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Un-finished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter				Class	Series designation	Nominal size and threads per inch
Nominal size and threads per inch	Series designation	Class			Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
2⅛-16 or 2.125-16	UN	2A	2.0828 / 2.0824	2.0557 / 2.0551	2.0774 / 2.0778	2.0774 / 2.0770	2.0639 / 2.0645	2.12340 / 2.12324	2.11400 / 2.11416		2.1250 / 2.1256	2.0844 / 2.0818	2.1185 / 2.1179	2.0914 / 2.0910	2.0914 / 2.0918	2.05700 / 2.05716	2.07100 / 2.07084	2B	UN	2⅛-16 or 2.125-16
		3A	2.0841 / 2.0840	2.0573 / 2.0567	2.0804 / 2.0808	2.0804 / 2.0800	2.0669 / 2.0675	2.12500 / 2.12484	2.11560 / 2.11576		2.1250 / 2.1256	2.0844 / 2.0818	2.1167 / 2.1161	2.0896 / 2.0892	2.0896 / 2.0900	2.05709 / 2.05716	2.06580 / 2.06564	3B		
2⅛-20 or 2.125-20	UN	2A	2.0910 / 2.0906	2.0693 / 2.0688	2.0861 / 2.0865	2.0861 / 2.0857	2.0753 / 2.0758	2.12350 / 2.12334	2.11540 / 2.11556		2.1250 / 2.1255	2.0925 / 2.0929	2.1206 / 2.1201	2.0989 / 2.0989	2.0989 / 2.0993	2.07100 / 2.07116	2.08200 / 2.08184	2B	UN	2⅛-20 or 2.125-20
		3A	2.0925 / 2.0921	2.0708 / 2.0703	2.0888 / 2.0892	2.0888 / 2.0884	2.0780 / 2.0785	2.12500 / 2.12484	2.11690 / 2.11706		2.1250 / 2.1255	2.0925 / 2.0929	2.1190 / 2.1185	2.0973 / 2.0969	2.0973 / 2.0977	2.07100 / 2.07116	2.07870 / 2.07854	3B		
2¼-4½ or 2.250-4.5	UNC	1A	2.1028 / 2.1023	2.0066 / 2.0058	2.0882 / 2.0887	2.0882 / 2.0877	2.0401 / 2.0409	2.24710 / 2.24694	2.24100 / 2.24126		2.2500 / 2.2508	2.1057 / 2.1062	2.2209 / 2.2201	2.1247 / 2.1242	2.1247 / 2.1252	2.00900 / 2.00916	2.04500 / 2.04484	1B	UNC	2¼-4½ or 2.250-4.5
		2A	2.1028 / 2.1023	2.0066 / 2.0058	2.0931 / 2.0936	2.0931 / 2.0926	2.0450 / 2.0458	2.24700 / 2.24694	2.22510 / 2.22526		2.2500 / 2.2508	2.1057 / 2.1062	2.2145 / 2.2137	2.1183 / 2.1178	2.1183 / 2.1188	2.00900 / 2.00916	2.04500 / 2.04484	2B		
		3A	2.1057 / 2.1052	2.0095 / 2.0087	2.0984 / 2.0989	2.0984 / 2.0979	2.0503 / 2.0511	2.25040 / 2.24984	2.22800 / 2.22816	2.21410 / 2.21426	2.2500 / 2.2508	2.1057 / 2.1062	2.2114 / 2.2106	2.1152 / 2.1147	2.1152 / 2.1157	2.00900 / 2.00916	2.03610 / 2.03594	3B		
2¼-6 or 2.250-6	UN	2A	2.1391 / 2.1386	2.0669 / 2.0661	2.1303 / 2.1308	2.1303 / 2.1298	2.0942 / 2.0950	2.24740 / 2.24724	2.22920 / 2.22936		2.2500 / 2.2508	2.1417 / 2.1422	2.2253 / 2.2245	2.1531 / 2.1526	2.1531 / 2.1536	2.07000 / 2.07016	2.10000 / 2.09984	2B	UN	2¼-6 or 2.250-6
		3A	2.1417 / 2.1412	2.0695 / 2.0687	2.1351 / 2.1356	2.1351 / 2.1346	2.0990 / 2.0998	2.25000 / 2.24984	2.23180 / 2.23196	2.22510 / 2.22526	2.2500 / 2.2508	2.1417 / 2.1422	2.2224 / 2.2216	2.1502 / 2.1497	2.1502 / 2.1507	2.07000 / 2.07016	2.08960 / 2.08944	3B		
2¼-8 or 2.250-8	UN	2A	2.1664 / 2.1659	2.1123 / 2.1116	2.1584 / 2.1589	2.1584 / 2.1579	2.1313 / 2.1320	2.24760 / 2.24744	2.23260 / 2.23276		2.2500 / 2.2507	2.1688 / 2.1693	2.2333 / 2.2326	2.1792 / 2.1787	2.1792 / 2.1797	2.11500 / 2.11516	2.14000 / 2.13984	2B	UN	2¼-8 or 2.250-8
		3A	2.1688 / 2.1683	2.1147 / 2.1140	2.1628 / 2.1633	2.1628 / 2.1623	2.1357 / 2.1364	2.25000 / 2.24984	2.23500 / 2.23516	2.22510 / 2.22526	2.2500 / 2.2507	2.1688 / 2.1693	2.2307 / 2.2300	2.1766 / 2.1761	2.1766 / 2.1771	2.11500 / 2.11516	2.12970 / 2.12954	3B		
2¼-12 or 2.250-12	UN	2A	2.1941 / 2.1937	2.1580 / 2.1574	2.1880 / 2.1884	2.1880 / 2.1876	2.1700 / 2.1706	2.24820 / 2.24804	2.23900 / 2.23916		2.2500 / 2.2506	2.1959 / 2.1963	2.2399 / 2.2393	2.2038 / 2.2034	2.2038 / 2.2042	2.16000 / 2.16016	2.17800 / 2.17784	2B	UN	2¼-12 or 2.250-12
		3A	2.1959 / 2.1955	2.1598 / 2.1592	2.1914 / 2.1918	2.1914 / 2.1910	2.1734 / 2.1740	2.25000 / 2.24984	2.24060 / 2.24076		2.2500 / 2.2506	2.1959 / 2.1963	2.2379 / 2.2373	2.2018 / 2.2014	2.2018 / 2.2022	2.16000 / 2.16016	2.16980 / 2.16964	3B		
2¼-16 or 2.250-16	UN	2A	2.2078 / 2.2074	2.1807 / 2.1801	2.2024 / 2.2028	2.2021 / 2.2020	2.1889 / 2.1895	2.24840 / 2.24824	2.23900 / 2.23916		2.2500 / 2.2506	2.2094 / 2.2098	2.2435 / 2.2429	2.2164 / 2.2160	2.2164 / 2.2168	2.18200 / 2.18216	2.19600 / 2.19584	2B	UN	2¼-16 or 2.250-16
		3A	2.2094 / 2.2090	2.1823 / 2.1817	2.2054 / 2.2058	2.2054 / 2.2050	2.1919 / 2.1925	2.25000 / 2.24984	2.24060 / 2.24076		2.2500 / 2.2506	2.2094 / 2.2098	2.2417 / 2.2411	2.2146 / 2.2142	2.2146 / 2.2150	2.18200 / 2.18216	2.19080 / 2.19064	3B		
2¼-20 or 2.250-20	UN	2A	2.2160 / 2.2156	2.1943 / 2.1938	2.2111 / 2.2115	2.2111 / 2.2107	2.2003 / 2.2008	2.24850 / 2.24834	2.24040 / 2.24056		2.2500 / 2.2505	2.2175 / 2.2179	2.2456 / 2.2451	2.2239 / 2.2235	2.2239 / 2.2243	2.19600 / 2.19616	2.20700 / 2.20684	2B	UN	2¼-20 or 2.250-20
		3A	2.2175 / 2.2171	2.1958 / 2.1953	2.2138 / 2.2142	2.2138 / 2.2134	2.2030 / 2.2035	2.25000 / 2.24984	2.24190 / 2.24206		2.2500 / 2.2505	2.2175 / 2.2179	2.2440 / 2.2435	2.2223 / 2.2219	2.2223 / 2.2227	2.19600 / 2.19616	2.20370 / 2.20354	3B		
2⅜-6 or 2.375-6	UN	2A	2.2640 / 2.2635	2.1918 / 2.1910	2.2551 / 2.2556	2.2551 / 2.2546	2.2190 / 2.2198	2.37230 / 2.37214	2.35410 / 2.35426		2.3750 / 2.3758	2.2667 / 2.2672	2.3504 / 2.3496	2.2782 / 2.2777	2.2782 / 2.2787	2.19500 / 2.19516	2.22600 / 2.22584	2B	UN	2⅜-6 or 2.375-6
		3A	2.2667 / 2.2662	2.1945 / 2.1937	2.2601 / 2.2606	2.2601 / 2.2596	2.2240 / 2.2248	2.37500 / 2.37484	2.35680 / 2.35696		2.3750 / 2.3758	2.2667 / 2.2672	2.3475 / 2.3467	2.2753 / 2.2748	2.2753 / 2.2758	2.19500 / 2.19516	2.21460 / 2.21444	3B		
2⅜-8 or 2.375-8	UN	2A	2.2914 / 2.2909	2.2373 / 2.2366	2.2833 / 2.2838	2.2833 / 2.2828	2.2562 / 2.2569	2.37260 / 2.37244	2.35760 / 2.35776		2.3750 / 2.3757	2.2938 / 2.2943	2.3584 / 2.3577	2.3043 / 2.3038	2.3043 / 2.3048	2.24000 / 2.24016	2.26500 / 2.26484	2B	UN	2⅜-8 or 2.375-8
		3A	2.2938 / 2.2933	2.2397 / 2.2390	2.2878 / 2.2883	2.2878 / 2.2873	2.2607 / 2.2614	2.37500 / 2.37484	2.36000 / 2.36016		2.3750 / 2.3757	2.2938 / 2.2943	2.3558 / 2.3551	2.3017 / 2.3012	2.3017 / 2.3022	2.24000 / 2.24016	2.25470 / 2.25454	3B		

Screw-thread dimension table (Unified inch screw threads). All dimensions in inches. Each cell lists the stacked values as printed.

	2⅜–12 or 2.375–12 (UN)	2⅜–16 or 2.375–16 (UN)	2⅜–20 or 2.375–20 (UN)	2⅜–4 or 2.500–4 (UNC)	2½–6 or 2.500–6 (UN)	2½–8 or 2.500–8 (UN)	2½–12 or 2.500–12 (UN)	2½–16 or 2.500–16 (UN)	2½–20 or 2.500–20 (UN)	2⅝–6 or 2.625–6 (UN)	2⅝–8 or 2.625–8 (UN)	2⅝–12 or 2.625–12 (UN)	2⅝–16 or 2.625–16 (UN)	2⅝–20 or 2.625–20 (UN)	2¾–4 or 2.750–4 (UNC)
Class (internal)	2B 3B	2B 3B	2B 3B	1B 2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	1B 2B 3B
B1	2.30300 2.30284 2.29480 2.29464	2.32100 2.32084 2.31580 2.31564	2.33200 2.33184 2.32870 2.32854	2.26700 2.26684 2.26700 2.26684 2.25940 2.25924	2.35000 2.34984 2.33960 2.33944	2.39000 2.38984 2.37970 2.37954	2.42800 2.42784 2.41980 2.41964	2.44600 2.44584 2.44080 2.44064	2.45700 2.45684 2.45370 2.45354	2.4750 2.4748 2.4646 2.4644	2.5150 2.5148 2.5047 2.5045	2.5530 2.5528 2.5448 2.5446	2.5710 2.5708 2.5658 2.5656	2.5820 2.5818 2.5787 2.5785	2.5170 2.5168 2.5170 2.5168 2.5094 2.5092
B2	2.28500 2.28516 2.28500 2.28516	2.30700 2.30716 2.30700 2.30716	2.32100 2.32116 2.32100 2.32116	2.22900 2.22916 2.22900 2.22916 2.22900 2.22916	2.32000 2.32016 2.32000 2.32016	2.36500 2.36516 2.36500 2.36516	2.41000 2.41016 2.41000 2.41016	2.43200 2.43216 2.43200 2.43216	2.44600 2.44616 2.44600 2.44616	2.4450 2.4452 2.4450 2.4452	2.4900 2.4902 2.4900 2.4902	2.5350 2.5352 2.5350 2.5352	2.5570 2.5572 2.5570 2.5572	2.5710 2.5712 2.5710 2.5712	2.4790 2.4792 2.4790 2.4792 2.4790 2.4792
B3	2.3290 2.3294 2.3269 2.3273	2.3416 2.3420 2.3398 2.3402	2.3491 2.3495 2.3475 2.3479	2.3578 2.3583 2.3511 2.3516 2.3477 2.3482	2.4033 2.4038 2.4004 2.4009	2.4294 2.4299 2.4268 2.4273	2.4540 2.4544 2.4519 2.4523	2.4666 2.4670 2.4648 2.4652	2.4741 2.4745 2.4725 2.4729	2.5285 2.5290 2.5255 2.5260	2.5545 2.5550 2.5518 2.5523	2.5790 2.5794 2.5769 2.5773	2.5916 2.5920 2.5898 2.5902	2.5991 2.5995 2.5975 2.5979	2.6082 2.6087 2.6013 2.6018 2.5979 2.5984
B4	2.3290 2.3286 2.3269 2.3265	2.3416 2.3412 2.3398 2.3394	2.3491 2.3487 2.3475 2.3471	2.3578 2.3573 2.3511 2.3506 2.3477 2.3472	2.4033 2.4028 2.4004 2.3999	2.4294 2.4289 2.4268 2.4263	2.4540 2.4536 2.4519 2.4515	2.4666 2.4662 2.4648 2.4644	2.4741 2.4737 2.4725 2.4721	2.5285 2.5280 2.5255 2.5250	2.5545 2.5540 2.5518 2.5513	2.5790 2.5786 2.5769 2.5765	2.5916 2.5912 2.5898 2.5894	2.5991 2.5987 2.5975 2.5971	2.6082 2.6077 2.6013 2.6008 2.5979 2.5974
B5	2.3651 2.3645 2.3630 2.3624	2.3687 2.3681 2.3669 2.3663	2.3708 2.3703 2.3692 2.3687	2.4661 2.4652 2.4594 2.4585 2.4560 2.4551	2.4755 2.4747 2.4726 2.4718	2.4835 2.4828 2.4809 2.4802	2.4901 2.4895 2.4880 2.4874	2.4937 2.4931 2.4919 2.4913	2.4958 2.4953 2.4942 2.4937	2.6007 2.5999 2.5977 2.5969	2.6086 2.6079 2.6059 2.6052	2.6151 2.6145 2.6130 2.6124	2.6187 2.6181 2.6169 2.6163	2.6208 2.6203 2.6192 2.6187	2.7165 2.7156 2.7096 2.7087 2.7062 2.7053
B6	2.3209 2.3213 2.3209 2.3213	2.3344 2.3344 2.3344 2.3348	2.3425 2.3429 2.3425 2.3429	2.3376 2.3381 2.3376 2.3381 2.3376 2.3381	2.3917 2.3922 2.3917 2.3922	2.4188 2.4193 2.4188 2.4193	2.4459 2.4463 2.4459 2.4463	2.4594 2.4598 2.4594 2.4598	2.4675 2.4679 2.4675 2.4679	2.5167 2.5172 2.5167 2.5172	2.5438 2.5438 2.5438 2.5443	2.5709 2.5713 2.5709 2.5713	2.5844 2.5848 2.5844 2.5848	2.5925 2.5929 2.5925 2.5929	2.5876 2.5881 2.5876 2.5881 2.5876 2.5881
B7	2.3750 2.3756 2.3750 2.3756	2.3750 2.3756 2.3750 2.3756	2.3750 2.3755 2.3750 2.3755	2.5000 2.5009 2.5000 2.5009 2.5000 2.5009	2.5000 2.5008 2.5000 2.5008	2.5000 2.5007 2.5000 2.5007	2.5000 2.5006 2.5000 2.5006	2.5000 2.5006 2.5000 2.5006	2.5000 2.5005 2.5000 2.5005	2.6250 2.6258 2.6250 2.6258	2.6250 2.6257 2.6250 2.6257	2.6250 2.6256 2.6250 2.6256	2.6250 2.6256 2.6250 2.6256	2.6250 2.6255 2.6250 2.6255	2.7500 2.7509 2.7500 2.7509 2.7500 2.7509
B8	—	—	—	2.46120 2.46136	—	—	—	—	2.47510 2.47526	—	—	—	—	—	2.7111 2.7113
B9	2.36170 2.36186 2.36360 2.36376	2.36390 2.36406 2.36760 2.36576	2.36540 2.36556 2.36690 2.36706	2.46120 2.46136 2.47310 2.47326 2.47620 2.47636	2.47910 2.47926 2.48180 2.48196	2.48260 2.48276 2.48500 2.48516	2.48670 2.48686 2.48860 2.48876	2.48890 2.48906 2.49060 2.49076	2.49040 2.49056 2.49190 2.49206	2.6041 2.6043 2.6068 2.6070	2.6075 2.6077 2.6100 2.6102	2.6117 2.6119 2.6136 2.6138	2.6139 2.6141 2.6156 2.6158	2.6154 2.6156 2.6169 2.6171	2.7111 2.7113 2.7230 2.7232 2.7262 2.7264
B10	2.37310 2.37294 2.37500 2.37484	2.37330 2.37314 2.37500 2.37484	2.37350 2.37334 2.37500 2.37484	2.49670 2.49674 2.49690 2.50000 2.50000 2.49984	2.49730 2.49714 2.50000 2.49984	2.49760 2.49744 2.50000 2.49984	2.49810 2.49794 2.50000 2.49984	2.49830 2.49814 2.50000 2.49984	2.49850 2.49834 2.50000 2.49984	2.6223 2.6221 2.6250 2.6248	2.6225 2.6223 2.6250 2.6248	2.6231 2.6229 2.6250 2.6248	2.6231 2.6229 2.6250 2.6248	2.6235 2.6233 2.6250 2.6248	2.7468 2.7466 2.7466 2.7500 2.7500 2.7498
B11	2.2948 2.2954 2.2983 2.2989	2.3137 2.3143 2.3168 2.3174	2.3251 2.3256 2.3279 2.3284	2.2649 2.2638 2.2700 2.2709 2.2757 2.2766	2.3439 2.3447 2.3489 2.3497	2.3811 2.3818 2.3856 2.3863	2.4198 2.4204 2.4233 2.4239	2.4387 2.4393 2.4418 2.4424	2.4501 2.4506 2.4529 2.4534	2.4689 2.4697 2.4738 2.4746	2.5060 2.5067 2.5105 2.5112	2.5448 2.5454 2.5483 2.5489	2.5637 2.5643 2.5668 2.5674	2.5751 2.5756 2.5779 2.5784	2.5145 2.5154 2.5198 2.5207 2.5256 2.5265
B12	2.3128 2.3124 2.3163 2.3159	2.3272 2.3268 2.3303 2.3299	2.3359 2.3355 2.3387 2.3383	2.3190 2.3185 2.3241 2.3236 2.3298 2.3293	2.3800 2.3795 2.3850 2.3845	2.4082 2.4077 2.4127 2.4122	2.4378 2.4374 2.4413 2.4409	2.4522 2.4518 2.4553 2.4549	2.4609 2.4605 2.4637 2.4633	2.5050 2.5045 2.5099 2.5094	2.5331 2.5326 2.5376 2.5371	2.5628 2.5624 2.5663 2.5659	2.5772 2.5768 2.5803 2.5799	2.5859 2.5855 2.5887 2.5883	2.5686 2.5681 2.5739 2.5734 2.5797 2.5792
B13	2.3128 2.3132 2.3163 2.3167	2.3272 2.3276 2.3303 2.3307	2.3359 2.3363 2.3387 2.3391	2.3190 2.3195 2.3241 2.3246 2.3298 2.3303	2.3800 2.3805 2.3850 2.3855	2.4082 2.4087 2.4127 2.4132	2.4378 2.4382 2.4413 2.4417	2.4522 2.4526 2.4553 2.4557	2.4609 2.4613 2.4637 2.4641	2.5050 2.5055 2.5099 2.5104	2.5331 2.5336 2.5376 2.5381	2.5628 2.5632 2.5663 2.5667	2.5772 2.5776 2.5803 2.5807	2.5859 2.5863 2.5887 2.5891	2.5686 2.5691 2.5739 2.5744 2.5797 2.5802
B14	2.2829 2.2823 2.2848 2.2842	2.3056 2.3050 2.3073 2.3067	2.3193 2.3188 2.3208 2.3203	2.2262 2.2253 2.2262 2.2253 2.2293 2.2284	2.3168 2.3160 2.3195 2.3187	2.3623 2.3616 2.3647 2.3640	2.4079 2.4073 2.4098 2.4092	2.4306 2.4300 2.4323 2.4317	2.4443 2.4438 2.4458 2.4453	2.4418 2.4410 2.4445 2.4437	2.4872 2.4865 2.4897 2.4890	2.5329 2.5323 2.5348 2.5342	2.5556 2.5550 2.5573 2.5567	2.5693 2.5688 2.5708 2.5703	2.4761 2.4752 2.4761 2.4752 2.4793 2.4784
B15	2.3190 2.3186 2.3209 2.3205	2.3327 2.3323 2.3344 2.3340	2.3410 2.3406 2.3425 2.3421	2.2345 2.2340 2.2345 2.2340 2.2376 2.2371	2.3880 2.3885 2.3917 2.3912	2.4164 2.4159 2.4188 2.4183	2.4440 2.4436 2.4459 2.4455	2.4577 2.4573 2.4594 2.4590	2.4660 2.4656 2.4675 2.4671	2.5135 2.5135 2.5167 2.5162	2.5413 2.5408 2.5438 2.5433	2.5690 2.5686 2.5709 2.5705	2.5827 2.5823 2.5844 2.5840	2.5910 2.5906 2.5925 2.5921	2.5844 2.5839 2.5844 2.5839 2.5876 2.5871
Class (external)	2A 3A	2A 3A	2A 3A	1A 2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	1A 2A 3A

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

1	2	3	Gages for external threads									Gages for internal threads							19	20	21
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter					
			GO		LO, classes 1A and 2A, NOT GO, class 3A			GO	NOT GO		GO			III		GO	NOT GO				
					Pitch diameter						Major	Pitch	Major	Pitch diameter							
Nominal size and threads per inch	Series designation	Class	Pitch diameter	Minor diameter	Plus tolerance gage	Minus tolerance gage	Minor diameter		Semi-finished	Un-finished hot-rolled material	diameter	diameter	diameter	Minus tolerance gage	Plus tolerance gage			Class	Series designation	Nominal size and threads per inch
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
2¾-6 or 2.750-6	UN	2A	2.6390	2.5668	2.6299	2.6299	2.5938	2.7473	2.7291		2.7500	2.6417	2.7258	2.6536	2.6536	2.5700	2.6000	2B	UN	2¾-6 or 2.750-6
			2.6385	2.5660	2.6304	2.6294	2.5946	2.7471	2.7293		2.7508	2.6422	2.7250	2.6531	2.6541	2.5702	2.5998			
		3A	2.6417	2.5695	2.6349	2.6349	2.5988	2.7500	2.7318		2.7500	2.6417	2.7228	2.6506	2.6506	2.5700	2.5896	3B		
			2.6412	2.5687	2.6354	2.6314	2.5996	2.7498	2.7320		2.7508	2.6422	2.7220	2.6501	2.6511	2.5702	2.5894			
2¾-8 or 2.750-8	UN	2A	2.6663	2.6122	2.6580	2.6580	2.6309	2.7475	2.7325	2.7250	2.7500	2.6688	2.7337	2.6796	2.6796	2.6150	2.6400	2B	UN	2¾-8 or 2.750-8
			2.6658	2.6115	2.6585	2.6575	2.6316	2.7473	2.7327	2.7252	2.7507	2.6693	2.7330	2.6791	2.6801	2.6152	2.6398			
		3A	2.6688	2.6147	2.6625	2.6625	2.6351	2.7500	2.7350		2.7500	2.6688	2.7310	2.6769	2.6769	2.6150	2.6297	3B		
			2.6683	2.6140	2.6630	2.6620	2.6361	2.7498	2.7352		2.7507	2.6693	2.7303	2.6764	2.6774	2.6152	2.6295			
2¾-12 or 2.750-12	UN	2A	2.6940	2.6579	2.6878	2.6878	2.6698	2.7481	2.7367		2.7500	2.6959	2.7401	2.7046	2.7040	2.6600	2.6780	2B	UN	2¾-12 or 2.750-12
			2.6936	2.6573	2.6882	2.6874	2.6704	2.7479	2.7369		2.7506	2.6963	2.7395	2.7036	2.7044	2.6602	2.6778			
		3A	2.6959	2.6598	2.6913	2.6913	2.6733	2.7500	2.7386		2.7500	2.6959	2.7380	2.7019	2.7019	2.6600	2.6698	3B		
			2.6955	2.6592	2.6917	2.6909	2.6739	2.7498	2.7388		2.7506	2.6963	2.7374	2.7015	2.7023	2.6602	2.6696			
2¾-16 or 2.750-16	UN	2A	2.7077	2.6806	2.7022	2.7022	2.6887	2.7483	2.7389		2.7500	2.7094	2.7437	2.7166	2.7166	2.6820	2.6960	2B	UN	2¾-16 or 2.750-16
			2.7073	2.6800	2.7026	2.7018	2.6893	2.7481	2.7391		2.7506	2.7098	2.7431	2.7162	2.7170	2.6822	2.6958			
		3A	2.7094	2.6823	2.7053	2.7053	2.6918	2.7500	2.7406		2.7500	2.7094	2.7419	2.7148	2.7148	2.6820	2.6908	3B		
			2.7090	2.6817	2.7057	2.7049	2.6924	2.7498	2.7408		2.7506	2.7098	2.7413	2.7144	2.7152	2.6822	2.6906			
2¾-20 or 2.750-20	UN	2A	2.7160	2.6943	2.7109	2.7109	2.7001	2.7485	2.7401		2.7500	2.7175	2.7458	2.7241	2.7241	2.6960	2.7070	2B	UN	2¾-20 or 2.750-20
			2.7156	2.6938	2.7113	2.7105	2.7006	2.7483	2.7406		2.7505	2.7179	2.7453	2.7237	2.7245	2.6962	2.7068			
		3A	2.7175	2.6958	2.7137	2.7137	2.7029	2.7500	2.7419		2.7500	2.7175	2.7442	2.7225	2.7225	2.6960	2.7037	3B		
			2.7171	2.6953	2.7141	2.7133	2.7034	2.7498	2.7421		2.7505	2.7179	2.7437	2.7221	2.7229	2.6962	2.7035			
2⅞-6 or 2.875-6	UN	2A	2.7639	2.6917	2.7547	2.7547	2.7186	2.8722	2.8540		2.8750	2.7667	2.8509	2.7787	2.7787	2.6950	2.7250	2B	UN	2⅞-6 or 2.875-6
			2.7634	2.6909	2.7552	2.7542	2.7194	2.8720	2.8542		2.8758	2.7672	2.8501	2.7782	2.7792	2.6952	2.7248			
		3A	2.7667	2.6945	2.7598	2.7598	2.7237	2.8750	2.8568		2.8750	2.7667	2.8479	2.7757	2.7757	2.6950	2.7146	3B		
			2.7662	2.6937	2.7603	2.7593	2.7245	2.8748	2.8570		2.8758	2.7672	2.8471	2.7752	2.7762	2.6952	2.7144			
2⅞-8 or 2.875-8	UN	2A	2.7913	2.7372	2.7829	2.7829	2.7558	2.8725	2.8575		2.8750	2.7938	2.8589	2.8048	2.8048	2.7400	2.7650	2B	UN	2⅞-8 or 2.875-8
			2.7908	2.7365	2.7834	2.7824	2.7565	2.8723	2.8577		2.8757	2.7943	2.8582	2.8043	2.8053	2.7402	2.7648			
		3A	2.7938	2.7397	2.7875	2.7875	2.7604	2.8750	2.8600		2.8750	2.7938	2.8561	2.8020	2.8020	2.7400	2.7547	3B		
			2.7933	2.7390	2.7880	2.7870	2.7611	2.8748	2.8602		2.8757	2.7943	2.8554	2.8015	2.8025	2.7402	2.7545			
2⅞-12 or 2.875-12	UN	2A	2.8190	2.7829	2.8127	2.8127	2.7947	2.8731	2.8617		2.8750	2.8209	2.8652	2.8291	2.8291	2.7850	2.8030	2B	UN	2⅞-12 or 2.875-12
			2.8186	2.7823	2.8131	2.8123	2.7953	2.8729	2.8619		2.8756	2.8213	2.8646	2.8287	2.8295	2.7852	2.8028			
		3A	2.8209	2.7848	2.8162	2.8162	2.7982	2.8750	2.8636		2.8750	2.8209	2.8632	2.8271	2.8271	2.7850	2.7948	3B		
			2.8205	2.7842	2.8166	2.8158	2.7988	2.8748	2.8638		2.8756	2.8213	2.8626	2.8267	2.8275	2.7852	2.7946			
2⅞-16 or 2.875-16	UN	2A	2.8327	2.8056	2.8271	2.8271	2.8136	2.8733	2.8639		2.8750	2.8344	2.8688	2.8417	2.8417	2.8070	2.8210	2B	UN	2⅞-16 or 2.875-16
			2.8323	2.8050	2.8275	2.8267	2.8142	2.8731	2.8641		2.8756	2.8348	2.8682	2.8413	2.8421	2.8072	2.8208			
		3A	2.8344	2.8073	2.8302	2.8302	2.8167	2.8750	2.8656		2.8750	2.8344	2.8670	2.8399	2.8399	2.8070	2.8158	3B		
			2.8340	2.8067	2.8306	2.8298	2.8173	2.8748	2.8658		2.8756	2.8348	2.8664	2.8395	2.8403	2.8072	2.8156			
2⅞-20 or 2.875-20	UN	2A	2.8409	2.8192	2.8357	2.8357	2.8249	2.8734	2.8653		2.8750	2.8425	2.8710	2.8493	2.8493	2.8210	2.8320	2B	UN	2⅞-20 or 2.875-20
			2.8405	2.8187	2.8361	2.8353	2.8254	2.8732	2.8655		2.8755	2.8429	2.8705	2.8489	2.8497	2.8212	2.8318			
		3A	2.8425	2.8208	2.8386	2.8386	2.8278	2.8750	2.8669		2.8750	2.8425	2.8693	2.8476	2.8476	2.8210	2.8287	3B		
			2.8421	2.8203	2.8390	2.8382	2.8283	2.8748	2.8671		2.8755	2.8429	2.8688	2.8472	2.8480	2.8212	2.8285			

	3-4 or 3.000-4	3-6 or 3.000-6	3-8 or 3.000-8	3-12 or 3.000-12	3-16 or 3.000-16	3-20 or 3.000-20	3⅛-6 or 3.125-6	3⅛-8 or 3.125-8	3⅛-12 or 3.125-12	3⅛-16 or 3.125-16	3¼-4 or 3.250-4	3¼-6 or 3.250-6	3¼-8 or 3.250-8	3¼-12 or 3.250-12	3¼-16 or 3.250-16
Series	UNC	UN	UN	UN	UN	UN	UN	UN	UN	UN	UNC	UN	UN	UN	UN
Class	1B 2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	1B 2B 3B	2B 3B	2B 3B	2B 3B	2B 3B
	2.7670 2.7668 2.7670 2.7668 2.7594 2.7592	2.8500 2.8498 2.8396 2.8394	2.8900 2.8898 2.8797 2.8795	2.9280 2.9278 2.9198 2.9196	2.9460 2.9458 2.9408 2.9406	2.9570 2.9568 2.9537 2.9535	2.9750 2.9748 2.9646 2.9644	3.0150 3.0148 3.0047 3.0045	3.0530 3.0528 3.0448 3.0446	3.0710 3.0708 3.0658 3.0656	3.1000 3.0998 3.0836 3.0894	3.1400 3.1398 3.1297 3.1295	3.1780 3.1778 3.1698 3.1696	3.1960 3.1958 3.1908 3.1906	
	2.8585 2.8590 2.8515 2.8520 2.8480 2.8485	2.9038 2.9043 2.9008 2.9013	2.9299 2.9304 2.9271 2.9276	2.9541 2.9545 2.9521 2.9525	2.9667 2.9671 2.9649 2.9653	2.9743 2.9747 2.9726 2.9730	3.0289 3.0294 3.0259 3.0264	3.0550 3.0555 3.0522 3.0527	3.0917 3.0921 3.0899 3.0903	3.1088 3.1093 3.1017 3.1022	3.1540 3.1545 3.1509 3.1514	3.1801 3.1806 3.1773 3.1778	3.2041 3.2045 3.2021 3.2025	3.2167 3.2171 3.2149 3.2153	
	2.8585 2.8580 2.8515 2.8510 2.8480 2.8475	2.9038 2.9033 2.9008 2.9003	2.9299 2.9294 2.9271 2.9266	2.9541 2.9537 2.9521 2.9517	2.9667 2.9663 2.9649 2.9645	2.9743 2.9739 2.9726 2.9722	3.0289 3.0284 3.0259 3.0254	3.0550 3.0545 3.0522 3.0517	3.0917 3.0913 3.0899 3.0895	3.1088 3.1083 3.1017 3.1012	3.1540 3.1535 3.1509 3.1504	3.1801 3.1796 3.1773 3.1768	3.2041 3.2037 3.2021 3.2017	3.2167 3.2163 3.2149 3.2145	
	2.9668 2.9659 2.9598 2.9589 2.9563 2.9554	2.9760 2.9752 2.9730 2.9722	2.9840 2.9833 2.9812 2.9805	2.9902 2.9896 2.9882 2.9876	2.9938 2.9932 2.9920 2.9914	2.9960 2.9955 2.9943 2.9938	3.1011 3.1003 3.0981 3.0973	3.1091 3.1084 3.1063 3.1056	3.1152 3.1146 3.1132 3.1126	3.1188 3.1182 3.1170 3.1164	3.2171 3.2162 3.2100 3.2091 3.2065 3.2056	3.2312 3.2335 3.2314 3.2307	3.2312 3.2335 3.2314 3.2307	3.2438 3.2432 3.2420 3.2414	
	2.8376 2.8381 2.8376 2.8381 2.8376 2.8381	2.8917 2.8922 2.8917 2.8922	2.9188 2.9193 2.9188 2.9193	2.9459 2.9463 2.9459 2.9463	2.9594 2.9598 2.9594 2.9598	2.9675 2.9679 2.9675 2.9679	3.0167 3.0172 3.0167 3.0172	3.0438 3.0443 3.0438 3.0443	3.0709 3.0713 3.0709 3.0713	3.0844 3.0848 3.0844 3.0848	3.0876 3.0881 3.0876 3.0881	3.1417 3.1422 3.1417 3.1422	3.1688 3.1693 3.1688 3.1693	3.1959 3.1963 3.1959 3.1963	3.2094 3.2098 3.2094 3.2098
	3.0000 3.0009 3.0000 3.0009 3.0000 3.0008	3.0000 3.0008 3.0000 3.0008	3.0000 3.0007 3.0000 3.0007	3.0000 3.0006 3.0000 3.0006	3.0000 3.0006 3.0000 3.0006	3.0000 3.0006 3.0000 3.0006	3.1250 3.1258 3.1250 3.1258	3.1250 3.1257 3.1250 3.1257	3.1250 3.1256 3.1250 3.1256	3.1250 3.1256 3.1250 3.1256	3.2500 3.2509 3.2500 3.2509 3.2500 3.2508	3.2500 3.2508 3.2500 3.2508	3.2500 3.2507 3.2500 3.2507	3.2500 3.2506 3.2500 3.2506	3.2500 3.2506 3.2500 3.2506
	— — 2.9611 2.9613	—	—	—	—	—	2.9749 2.9751	—	—	—	3.2110 3.2112	—	—	—	3.2249 3.2251
	2.9611 2.9613 2.9730 2.9732 2.9762 2.9764	2.9790 2.9792 2.9818 2.9820	2.9824 2.9826 2.9850 2.9852	2.9867 2.9869 2.9886 2.9888	2.9889 2.9891 2.9906 2.9908	2.9903 2.9905 2.9919 2.9921	3.1040 3.1042 3.1068 3.1070	3.1074 3.1076 3.1100 3.1102	3.1117 3.1119 3.1136 3.1138	3.1139 3.1141 3.1156 3.1158	3.2110 3.2112 3.2229 3.2231 3.2262 3.2264	3.2290 3.2292 3.2318 3.2320	3.2324 3.2326 3.2350 3.2352	3.2367 3.2369 3.2386 3.2388	3.2389 3.2391 3.2406 3.2408
	2.9968 2.9966 2.9966 2.9966 3.0000 2.9998	2.9972 2.9970 3.0000 2.9998	2.9974 2.9972 3.0000 2.9998	2.9981 2.9979 3.0000 2.9998	2.9983 2.9981 3.0000 2.9998	2.9984 2.9982 3.0000 2.9998	3.1222 3.1220 3.1250 3.1248	3.1224 3.1222 3.1250 3.1248	3.1231 3.1229 3.1250 3.1248	3.1233 3.1231 3.1250 3.1248	3.2467 3.2465 3.2467 3.2465 3.2500 3.2498	3.2474 3.2472 3.2500 3.2498	3.2481 3.2479 3.2500 3.2498	3.2483 3.2481 3.2500 3.2498	3.2483 3.2481 3.2500 3.2498
	2.7642 2.7651 2.7696 2.7705 2.7755 2.7764	2.8435 2.8443 2.8486 2.8494	2.8806 2.8813 2.8853 2.8860	2.9197 2.9203 2.9232 2.9238	2.9386 2.9392 2.9417 2.9423	2.9499 2.9504 2.9528 2.9533	2.9684 2.9692 2.9736 2.9744	3.0055 3.0062 3.0103 3.0110	3.0447 3.0453 3.0482 3.0488	3.0636 3.0642 3.0667 3.0673	3.0933 3.0941 3.0985 3.0993	3.1304 3.1311 3.1352 3.1359	3.1697 3.1703 3.1732 3.1738	3.1886 3.1892 3.1917 3.1923	
	2.8183 2.8178 2.8237 2.8232 2.8296 2.8291	2.8796 2.8791 2.8847 2.8842	2.9077 2.9072 2.9124 2.9119	2.9377 2.9373 2.9412 2.9408	2.9521 2.9517 2.9552 2.9548	2.9607 2.9603 2.9636 2.9632	3.0045 3.0040 3.0097 3.0092	3.0326 3.0321 3.0374 3.0369	3.0627 3.0623 3.0662 3.0658	3.0771 3.0767 3.0802 3.0798	3.1294 3.1289 3.1346 3.1341	3.1575 3.1570 3.1623 3.1618	3.1877 3.1873 3.1912 3.1908	3.2021 3.2017 3.2052 3.2048	
	2.8183 2.8188 2.8237 2.8242 2.8296 2.8301	2.8796 2.8801 2.8847 2.8852	2.9077 2.9082 2.9124 2.9129	2.9377 2.9381 2.9412 2.9416	2.9521 2.9525 2.9552 2.9556	2.9607 2.9611 2.9636 2.9640	3.0045 3.0050 3.0097 3.0102	3.0326 3.0331 3.0374 3.0379	3.0627 3.0631 3.0662 3.0666	3.0771 3.0775 3.0802 3.0806	3.1294 3.1299 3.1346 3.1351	3.1575 3.1580 3.1623 3.1628	3.1877 3.1881 3.1912 3.1916	3.2021 3.2025 3.2052 3.2056	
	2.7261 2.7252 2.7261 2.7252 2.7293 2.7284	2.8167 2.8159 2.8195 2.8187	2.8621 2.8614 2.8647 2.8640	2.9079 2.9073 2.9098 2.9092	2.9306 2.9300 2.9323 2.9317	2.9442 2.9437 2.9458 2.9453	2.9417 2.9409 2.9445 2.9437	2.9871 2.9864 2.9897 2.9890	3.0329 3.0323 3.0348 3.0342	3.0556 3.0550 3.0573 3.0567	3.0667 3.0659 3.0695 3.0687	3.1121 3.1114 3.1147 3.1140	3.1579 3.1573 3.1598 3.1592	3.1806 3.1800 3.1823 3.1817	
	2.8344 2.8339 2.8344 2.8339 2.8376 2.8371	2.8889 2.8884 2.8917 2.8912	2.9162 2.9157 2.9188 2.9183	2.9440 2.9436 2.9459 2.9455	2.9577 2.9573 2.9594 2.9590	2.9659 2.9655 2.9675 2.9671	3.0139 3.0131 3.0167 3.0162	3.0412 3.0407 3.0438 3.0433	3.0690 3.0686 3.0709 3.0705	3.0827 3.0823 3.0844 3.0840	3.0843 3.0838 3.0843 3.0838 3.0876 3.0871	3.1389 3.1384 3.1417 3.1412	3.1662 3.1657 3.1688 3.1683	3.1940 3.1936 3.1959 3.1955	3.2077 3.2073 3.2094 3.2090
Class	1A 2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	1A 2A 3A	2A 3A	2A 3A	2A 3A	2A 3A

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Column groupings (left → right):
- **Gages for external threads** — X thread ring gages: GO (Pitch diameter, Minor diameter); LO, classes 1A and 2A / NOT GO, class 3A (Pitch diameter: Plus tolerance gage, Minus tolerance gage; Minor diameter). Z plain ring gages for major diameter: GO; NOT GO (Semifinished, Unfinished hot-rolled material).
- **Gages for internal threads** — X thread plug gages: GO (Major diameter, Pitch diameter); III (Major diameter; Pitch diameter: Minus tolerance gage, Plus tolerance gage). Z plain plug gages for minor diameter: GO, NOT GO.

All dimensions in inches (in.).

(1) Nominal size and threads per inch	(2) Series	(3) Class	(4) GO Pitch dia	(5) GO Minor dia	(6) Pitch dia + tol	(7) Pitch dia − tol	(8) Minor dia	(9) Z GO	(10) NOT GO Semifin.	(11) NOT GO Unfin.	(12) GO Major dia	(13) GO Pitch dia	(14) III Major dia	(15) III − tol	(16) III + tol	(17) Z GO	(18) Z NOT GO	(19) Class	(20) Series	(21) Nominal size
3⅜-6 or 3.375-6	UN	2A	3.2638	3.1916	3.2543	3.2543	3.2182	3.3721	3.3539		3.3750	3.2667	3.3513	3.2791	3.2791	3.1950	3.2250	2B	UN	3⅜-6 or 3.375-6
			3.2633	3.1908	3.2548	3.2538	3.2190	3.3719	3.3541		3.3758	3.2672	3.3505	3.2786	3.2796	3.1952	3.2248			
		3A	3.2667	3.1945	3.2595	3.2595	3.2234	3.3750	3.3568		3.3750	3.2667	3.3482	3.2760	3.2760	3.1950	3.2146	3B		
			3.2662	3.1937	3.2600	3.2590	3.2242	3.3748	3.3570		3.3758	3.2672	3.3474	3.2755	3.2765	3.1952	3.2144			
3⅜-8 or 3.375-8	UN	2A	3.2912	3.2371	3.2824	3.2824	3.2553	3.3724	3.3574		3.3750	3.2938	3.3593	3.3052	3.3052	3.2400	3.2650	2B	UN	3⅜-8 or 3.375-8
			3.2907	3.2364	3.2829	3.2819	3.2560	3.3722	3.3576		3.3757	3.2943	3.3586	3.3047	3.3057	3.2402	3.2648			
		3A	3.2938	3.2397	3.2872	3.2872	3.2601	3.3750	3.3600		3.3750	3.2938	3.3564	3.3023	3.3023	3.2400	3.2547	3B		
			3.2933	3.2390	3.2877	3.2867	3.2608	3.3748	3.3602		3.3757	3.2943	3.3557	3.3018	3.3028	3.2402	3.2545			
3⅜-12 or 3.375-12	UN	2A	3.3190	3.2829	3.3126	3.3126	3.2946	3.3731	3.3617		3.3750	3.3209	3.3654	3.3293	3.3293	3.2850	3.3030	2B	UN	3⅜-12 or 3.375-12
			3.3186	3.2823	3.3130	3.3122	3.2952	3.3729	3.3619		3.3756	3.3213	3.3648	3.3289	3.3297	3.2852	3.3028			
		3A	3.3209	3.2848	3.3161	3.3161	3.2981	3.3750	3.3636		3.3750	3.3209	3.3633	3.3272	3.3272	3.2850	3.2948	3B		
			3.3205	3.2842	3.3165	3.3157	3.2987	3.3748	3.3638		3.3756	3.3213	3.3627	3.3268	3.3276	3.2852	3.2946			
3⅜-16 or 3.375-16	UN	2A	3.3327	3.3056	3.3269	3.3269	3.3134	3.3733	3.3639		3.3750	3.3344	3.3690	3.3419	3.3419	3.3070	3.3210	2B	UN	3⅜-16 or 3.375-16
			3.3323	3.3050	3.3273	3.3265	3.3140	3.3731	3.3641		3.3756	3.3348	3.3684	3.3415	3.3423	3.3072	3.3208			
		3A	3.3344	3.3073	3.3301	3.3301	3.3166	3.3750	3.3656		3.3750	3.3344	3.3671	3.3400	3.3400	3.3070	3.3158	3B		
			3.3340	3.3067	3.3305	3.3297	3.3172	3.3748	3.3658		3.3756	3.3348	3.3665	3.3396	3.3404	3.3072	3.3156			
3½-4 or 3.500-4	UNC	1A	3.3343	3.2260	3.3177	3.3177	3.2636	3.4967		3.4610	3.5000	3.3376	3.4674	3.3591	3.3591	3.2290	3.2670	1B	UNC	3½-4 or 3.500-4
			3.3338	3.2251	3.3182	3.3172	3.2645	3.4965		3.4612	3.5009	3.3381	3.4665	3.3586	3.3596	3.2292	3.2668			
		2A	3.3343	3.2260	3.3233	3.3233	3.2692	3.4967	3.4729		3.5000	3.3376	3.4602	3.3519	3.3519	3.2290	3.2670	2B		
			3.3338	3.2251	3.3238	3.3228	3.2701	3.4965	3.4731		3.5009	3.3381	3.4593	3.3514	3.3524	3.2292	3.2668			
		3A	3.3376	3.2293	3.3293	3.3293	3.2752	3.5000	3.4762		3.5000	3.3376	3.4567	3.3484	3.3484	3.2290	3.2594	3B		
			3.3371	3.2284	3.3298	3.3288	3.2761	3.4998	3.4764		3.5009	3.3381	3.4558	3.3479	3.3489	3.2292	3.2592			
3½-6 or 3.500-6	UN	2A	3.3888	3.3166	3.3792	3.3792	3.3431	3.4971	3.4789	3.4749	3.5000	3.3917	3.4764	3.4042	3.4042	3.3200	3.3500	2B	UN	3½-6 or 3.500-6
			3.3883	3.3158	3.3797	3.3787	3.3439	3.4969	3.4791	3.4751	3.5008	3.3922	3.4756	3.4037	3.4047	3.3202	3.3498			
		3A	3.3917	3.3195	3.3845	3.3845	3.3484	3.5000	3.4818		3.5000	3.3917	3.4733	3.4011	3.4011	3.3200	3.3396	3B		
			3.3912	3.3187	3.3850	3.3840	3.3492	3.4998	3.4820		3.5008	3.3922	3.4725	3.4006	3.4016	3.3202	3.3394			
3½-8 or 3.500-8	UN	2A	3.4162	3.3621	3.4074	3.4074	3.3803	3.4974	3.4824		3.5000	3.4188	3.4844	3.4303	3.4303	3.3650	3.3900	2B	UN	3½-8 or 3.500-8
			3.4157	3.3614	3.4079	3.4069	3.3810	3.4972	3.4826		3.5007	3.4193	3.4837	3.4298	3.4308	3.3652	3.3898			
		3A	3.4188	3.3647	3.4122	3.4122	3.3851	3.5000	3.4850		3.5000	3.4188	3.4815	3.4274	3.4274	3.3650	3.3797	3B		
			3.4183	3.3640	3.4127	3.4117	3.3858	3.4998	3.4852		3.5007	3.4193	3.4808	3.4269	3.4279	3.3652	3.3795			
3½-12 or 3.500-12	UN	2A	3.4440	3.4079	3.4376	3.4376	3.4196	3.4981	3.4867		3.5000	3.4459	3.4904	3.4543	3.4543	3.4100	3.4280	2B	UN	3½-12 or 3.500-12
			3.4436	3.4073	3.4380	3.4372	3.4202	3.4979	3.4869		3.5006	3.4463	3.4898	3.4539	3.4547	3.4102	3.4278			
		3A	3.4459	3.4098	3.4411	3.4411	3.4231	3.5000	3.4886		3.5000	3.4459	3.4883	3.4522	3.4522	3.4100	3.4198	3B		
			3.4455	3.4092	3.4415	3.4407	3.4237	3.4998	3.4888		3.5006	3.4463	3.4877	3.4518	3.4526	3.4102	3.4196			
3½-16 or 3.500-16	UN	2A	3.4577	3.4306	3.4519	3.4519	3.4384	3.4983	3.4889		3.5000	3.4594	3.4940	3.4669	3.4669	3.4320	3.4460	2B	UN	3½-16 or 3.500-16
			3.4573	3.4300	3.4523	3.4515	3.4390	3.4981	3.4891		3.5007	3.4598	3.4934	3.4665	3.4673	3.4322	3.4458			
		3A	3.4594	3.4323	3.4551	3.4551	3.4416	3.5000	3.4906		3.5000	3.4594	3.4921	3.4650	3.4650	3.4320	3.4408	3B		
			3.4590	3.4317	3.4555	3.4547	3.4422	3.4998	3.4908		3.5007	3.4598	3.4915	3.4646	3.4654	3.4322	3.4406			
3⅝-6 or 3.625-6	UN	2A	3.5138	3.4416	3.5041	3.5041	3.4680	3.6221	3.6039		3.6250	3.5167	3.6015	3.5293	3.5293	3.4450	3.4750	2B	UN	3⅝-6 or 3.625-6
			3.5133	3.4408	3.5046	3.5036	3.4688	3.6219	3.6041		3.6258	3.5172	3.6007	3.5288	3.5298	3.4452	3.4748			
		3A	3.5167	3.4445	3.5094	3.5094	3.4733	3.6250	3.6068		3.6250	3.5167	3.5984	3.5262	3.5262	3.4450	3.4646	3B		
			3.5162	3.4437	3.5099	3.5089	3.4741	3.6248	3.6070		3.6258	3.5172	3.5976	3.5257	3.5267	3.4452	3.4644			

Combined limits-of-size table for Unified (UN/UNC) screw threads, sizes 3.625 through 4.000 in. Internal-thread data (classes 2B/3B, and 1B where UNC) on the left; external-thread data (classes 2A/3A, and 1A where UNC) on the right. Columns are unlabeled on this page (headings carried on preceding page); values reproduced by position.

Internal-thread portion (columns V1–V7):

Size (designation)	Symbol	Class	V1	V2	V3	V4	V5	V6	V7
3⅝-8 or 3.625-8	UN	2B	3.5150	3.4900	3.5554	3.5554	3.6095	3.5438	3.6250
		2B	3.5148	3.4902	3.5559	3.5549	3.6088	3.5443	3.6257
		3B	3.5047	3.4900	3.5525	3.5525	3.6066	3.5438	3.6250
		3B	3.5045	3.4902	3.5530	3.5520	3.6059	3.5443	3.6257
3⅝-12 or 3.625-12	UN	2B	3.5530	3.5350	3.5793	3.5793	3.6154	3.5709	3.6250
		2B	3.5528	3.5350	3.5797	3.5772	3.6148	3.5709	3.6256
		3B	3.5448	3.5350	3.5772	3.5772	3.6133	3.5709	3.6250
		3B	3.5446	3.5352	3.5776	3.5768	3.6127	3.5713	3.6256
3⅝-16 or 3.625-16	UN	2B	3.5710	3.5570	3.5919	3.5919	3.6190	3.5844	3.6250
		2B	3.5708	3.5572	3.5923	3.5915	3.6184	3.5848	3.6256
		3B	3.5658	3.5570	3.5900	3.5900	3.6171	3.5844	3.6250
		3B	3.5656	3.5572	3.5904	3.5896	3.6165	3.5848	3.6256
3¾-4 or 3.750-4	UNC	1B	3.5170	3.4790	3.5919	3.5919	3.7177	3.5876	3.7500
		2B	3.5168	3.4792	3.6099	3.6089	3.7108	3.5881	3.7509
		3B	3.5094	3.4792	3.5985	3.5985	3.7068	3.5881	3.7509
3¾-6 or 3.750-6	UN	2B	3.6000	3.5570	3.6544	3.6544	3.7266	3.6417	3.7500
		2B	3.5998	3.5572	3.6549	3.6539	3.7258	3.6422	3.7508
		3B	3.5896	3.5570	3.6512	3.6512	3.7234	3.6417	3.7500
		3B	3.5894	3.5572	3.6517	3.6507	3.7226	3.6422	3.7508
3¾-8 or 3.750-8	UN	2B	3.6400	3.6150	3.6805	3.6805	3.7346	3.6688	3.7500
		2B	3.6398	3.6152	3.6810	3.6800	3.7339	3.6693	3.7507
		3B	3.6297	3.6150	3.6776	3.6771	3.7317	3.6688	3.7500
		3B	3.6295	3.6152	3.6781	3.6771	3.7310	3.6693	3.7507
3¾-12 or 3.750-12	UN	2B	3.6780	3.6630	3.7043	3.7043	3.7404	3.6959	3.7500
		2B	3.6778	3.6602	3.7047	3.7022	3.7398	3.6963	3.7506
		3B	3.6698	3.6600	3.7022	3.7022	3.7383	3.6959	3.7500
		3B	3.6696	3.6602	3.7026	3.7018	3.7377	3.6963	3.7506
3¾-16 or 3.750-16	UN	2B	3.6960	3.6820	3.7169	3.7169	3.7440	3.7094	3.7500
		2B	3.6958	3.6822	3.7173	3.7150	3.7434	3.7098	3.7506
		3B	3.6908	3.6820	3.7150	3.7150	3.7421	3.7094	3.7500
		3B	3.6906	3.6822	3.7154	3.7146	3.7415	3.7098	3.7506
3⅞-6 or 3.875-6	UN	2B	3.7250	3.6950	3.7795	3.7795	3.8517	3.7667	3.8750
		2B	3.7248	3.6952	3.7800	3.7763	3.8509	3.7672	3.8758
		3B	3.7146	3.6950	3.7763	3.7763	3.8485	3.7667	3.8750
		3B	3.7144	3.6952	3.7768	3.7758	3.8477	3.7672	3.8758
3⅞-8 or 3.875-8	UN	2B	3.7650	3.7400	3.8056	3.8056	3.8597	3.7938	3.8750
		2B	3.7648	3.7400	3.8061	3.8026	3.8590	3.7943	3.8757
		3B	3.7547	3.7400	3.8026	3.8026	3.8567	3.7938	3.8750
		3B	3.7545	3.7402	3.8031	3.8021	3.8560	3.7943	3.8757
3⅞-12 or 3.875-12	UN	2B	3.8030	3.8070	3.8294	3.8294	3.8655	3.8209	3.8750
		2B	3.8028	3.8072	3.8298	3.8273	3.8649	3.8213	3.8756
		3B	3.7948	3.8070	3.8273	3.8273	3.8634	3.8209	3.8750
		3B	3.7946	3.8072	3.8277	3.8269	3.8628	3.8213	3.8756
3⅞-16 or 3.875-16	UN	2B	3.8210	3.8070	3.8420	3.8420	3.8691	3.8344	3.8750
		2B	3.8208	3.8072	3.8424	3.8401	3.8685	3.8348	3.8756
		3B	3.8158	3.8070	3.8401	3.8401	3.8672	3.8344	3.8750
		3B	3.8156	3.8072	3.8405	3.8397	3.8666	3.8348	3.8756
4-4 or 4.000-4	UNC	1B	3.7670	3.7290	3.8597	3.8597	3.9680	3.8376	4.0000
		2B	3.7668	3.7292	3.8602	3.8523	3.9671	3.8381	4.0009
		3B	3.7594	3.7292	3.8487	3.8487	3.9570	3.8381	4.0009
4-6 or 4.000-6	UN	2B	3.8500	3.8200	3.9046	3.9045	3.9768	3.8917	4.0000
		2B	3.8498	3.8202	3.9051	3.9014	3.9760	3.8922	4.0008
		3B	3.8396	3.8200	3.9014	3.9009	3.9736	3.8917	4.0000
		3B	3.8394	3.8202	3.9019	3.9009	3.9728	3.8922	4.0008
4-8 or 4.000-8	UN	2B	3.8900	3.8650	3.9307	3.9307	3.9848	3.9188	4.0000
		2B	3.8898	3.8652	3.9312	3.9277	3.9841	3.9193	4.0007
		3B	3.8797	3.8650	3.9277	3.9277	3.9838	3.9188	4.0000
		3B	3.8795	3.8652	3.9282	3.9272	3.9811	3.9193	4.0007

External-thread portion (columns V8–V15):

Size (designation)	Class	V8	V9	V10	V11	V12	V13	V14	V15
3.625-8	2A	—	3.6073	3.6223	3.5051	3.5322	3.5322	3.4870	3.5411
	2A	—	3.6075	3.6221	3.5058	3.5317	3.5327	3.4863	3.5406
	3A	—	3.6100	3.6250	3.5100	3.5371	3.5371	3.4897	3.5438
	3A	—	3.6102	3.6248	3.5107	3.5366	3.5376	3.4890	3.5433
3.625-12	2A	—	3.6117	3.6231	3.5446	3.5626	3.5626	3.5329	3.5690
	2A	—	3.6119	3.6231	3.5452	3.5622	3.5630	3.5348	3.5686
	3A	—	3.6136	3.6250	3.5481	3.5661	3.5661	3.5348	3.5709
	3A	—	3.6138	3.6248	3.5487	3.5657	3.5665	3.5342	3.5705
3.625-16	2A	—	3.6139	3.6233	3.5634	3.5769	3.5769	3.5556	3.5827
	2A	—	3.6141	3.6231	3.5640	3.5765	3.5773	3.5550	3.5823
	3A	—	3.6156	3.6250	3.5666	3.5730	3.5735	3.5573	3.5844
	3A	—	3.6158	3.6248	3.5672	3.5725	3.5797	3.5567	3.5840
3.750-4	1A	3.7109	3.7109	3.7471	3.5133	3.5674	3.5674	3.4759	3.5842
	2A	3.7111	3.7111	3.7469	3.5189	3.5730	3.5730	3.4750	3.5876
	3A	—	—	3.7500	3.5251	3.5792	3.5792	3.4793	3.5876
3.750-6	2A	—	3.7289	3.7471	3.5929	3.6290	3.6290	3.5666	3.6388
	2A	—	3.7291	3.7469	3.5937	3.6285	3.6295	3.5658	3.6383
	3A	—	3.7318	3.7500	3.5983	3.6344	3.6344	3.5695	3.6417
	3A	—	3.7320	3.7498	3.5991	3.6339	3.6349	3.5687	3.6412
3.750-8	2A	—	3.7323	3.7473	3.6300	3.6571	3.6571	3.6120	3.6661
	2A	—	3.7325	3.7471	3.6307	3.6566	3.6576	3.6113	3.6656
	3A	—	3.7350	3.7500	3.6350	3.6621	3.6621	3.6147	3.6688
	3A	—	3.7352	3.7498	3.6357	3.6616	3.6626	3.6140	3.6683
3.750-12	2A	—	3.7367	3.7481	3.6696	3.6876	3.6876	3.6579	3.6940
	2A	—	3.7369	3.7479	3.6702	3.6872	3.6880	3.6573	3.6936
	3A	—	3.7386	3.7500	3.6731	3.6911	3.6911	3.6598	3.6959
	3A	—	3.7388	3.7498	3.6737	3.6907	3.6915	3.6592	3.6955
3.750-16	2A	—	3.7389	3.7483	3.6884	3.7019	3.7019	3.6806	3.7077
	2A	—	3.7391	3.7481	3.6890	3.7015	3.7023	3.6800	3.7073
	3A	—	3.7406	3.7500	3.6916	3.7051	3.7051	3.6823	3.7094
	3A	—	3.7408	3.7498	3.6922	3.7047	3.7055	3.6817	3.7090
3.875-6	2A	—	3.8538	3.8720	3.7177	3.7538	3.7538	3.6915	3.7637
	2A	—	3.8540	3.8718	3.7185	3.7533	3.7543	3.6907	3.7632
	3A	—	3.8568	3.8750	3.7232	3.7593	3.7593	3.6945	3.7667
	3A	—	3.8570	3.8748	3.7240	3.7588	3.7598	3.6937	3.7662
3.875-8	2A	—	3.8573	3.8723	3.7549	3.7820	3.7820	3.7370	3.7911
	2A	—	3.8575	3.8721	3.7556	3.7815	3.7825	3.7363	3.7906
	3A	—	3.8600	3.8750	3.7599	3.7870	3.7870	3.7397	3.7938
	3A	—	3.8602	3.8748	3.7606	3.7865	3.7875	3.7390	3.7933
3.875-12	2A	—	3.8616	3.8730	3.7944	3.8124	3.8124	3.8055	3.8189
	2A	—	3.8618	3.8728	3.7950	3.8120	3.8128	3.8049	3.8185
	3A	—	3.8636	3.8750	3.7980	3.8160	3.8160	3.8073	3.8209
	3A	—	3.8638	3.8748	3.7986	3.8156	3.8164	3.8067	3.8205
3.875-16	2A	—	3.8638	3.8732	3.8132	3.8267	3.8267	3.8055	3.8326
	2A	—	3.8640	3.8730	3.8138	3.8263	3.8271	3.8049	3.8322
	3A	—	3.8656	3.8750	3.8165	3.8300	3.8300	3.8073	3.8344
	3A	—	3.8658	3.8748	3.8171	3.8296	3.8304	3.8067	3.8340
4.000-4	1A	3.9609	3.9699	3.9966	3.7631	3.8172	3.8172	3.7259	3.8342
	2A	3.9611	3.9728	3.9964	3.7688	3.8228	3.8228	3.7250	3.8342
	3A	—	3.9762	4.0000	3.7750	3.8290	3.8290	3.7293	3.8376
4.000-6	2A	—	3.9788	3.9970	3.8799	3.9070	3.9070	3.8165	3.8887
	2A	—	3.9790	3.9968	3.8806	3.9065	3.9075	3.8157	3.8882
	3A	—	3.9818	4.0000	3.8849	3.9120	3.9120	3.8195	3.8917
	3A	—	3.9820	3.9998	3.8856	3.9115	3.9125	3.8187	3.8912
4.000-8	2A	3.9748	3.9823	3.9973	3.8799	3.9070	3.9070	3.8620	3.9161
	2A	3.9750	3.9825	3.9971	3.8806	3.9065	3.9075	3.8613	3.9156
	3A	—	3.9850	4.0000	3.8849	3.9120	3.9120	3.8647	3.9183
	3A	—	3.9852	3.9998	3.8856	3.9125	3.9125	3.8640	3.9188

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

			Gages for external threads								Gages for internal threads										
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter					
			GO		LO, classes 1A and 2A, class 3A NOT GO			GO	NOT GO		GO		III			GO	NOT GO				
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Un-finished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter							
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage						
Nominal size and threads per inch	Series designation	Class																	Class	Series designation	Nominal size and threads per inch
1	2	3	4	5	6	7	8	9	10.	11	12	13	14	15	16	17	18	19	20	21
4-12 or 4.000-12	UN	2A	3.9439 / 3.9435	3.9078 / 3.9072	3.9374 / 3.9378	3.9374 / 3.9370	3.9194 / 3.9210	3.9989 / 3.9978	3.9866 / 3.9868		4.0000 / 4.0000	3.9459 / 3.9463	3.9905 / 3.9899	3.9544 / 3.9540	3.9544 / 3.9548	3.9100 / 3.9102	3.9280 / 3.9278	2B	UN	4-12 or 4.000-12
		3A	3.9459 / 3.9455	3.9098 / 3.9092	3.9410 / 3.9414	3.9410 / 3.9406	3.9233 / 3.9236	4.0000 / 3.9998	3.9886 / 3.9888		4.0006 / 4.0006	3.9463 / 3.9463	3.9884 / 3.9878	3.9523 / 3.9519	3.9523 / 3.9527	3.9100 / 3.9102	3.9198 / 3.9196	3B		
4-16 or 4.000-16	UN	2A	3.9576 / 3.9572	3.9305 / 3.9299	3.9517 / 3.9521	3.9517 / 3.9513	3.9382 / 3.9338	3.9982 / 3.9980	3.9888 / 3.9890		4.0000 / 4.0000	3.9594 / 3.9598	3.9941 / 3.9935	3.9670 / 3.9666	3.9670 / 3.9674	3.9320 / 3.9322	3.9460 / 3.9458	2B	UN	4-16 or 4.000-16
		3A	3.9594 / 3.9590	3.9323 / 3.9317	3.9550 / 3.9554	3.9550 / 3.9546	3.9415 / 3.9421	4.0000 / 3.9998	3.9906 / 3.9908		4.0006 / 4.0006	3.9594 / 3.9598	3.9922 / 3.9916	3.9651 / 3.9647	3.9651 / 3.9655	3.9320 / 3.9322	3.9408 / 3.9406	3B		
4⅛-6 or 4.125-6	UN	2A	4.0137 / 4.0131	3.9415 / 3.9402	4.0037 / 4.0043	4.0037 / 4.0031	3.9676 / 3.9689	4.1220 / 4.1218	4.1038 / 4.1040		4.1250 / 4.1263	4.0167 / 4.0173	4.1019 / 4.1006	4.0297 / 4.0291	4.0297 / 4.0303	3.9450 / 3.9452	3.9750 / 3.9748	2B	UN	4⅛-6 or 4.125-6
		3A	4.0167 / 4.0161	3.9445 / 3.9432	4.0092 / 4.0098	4.0092 / 4.0086	3.9731 / 3.9744	4.1250 / 4.1248	4.1068 / 4.1070		4.1250 / 4.1263	4.0167 / 4.0173	4.0986 / 4.0973	4.0264 / 4.0258	4.0264 / 4.0270	3.9450 / 3.9452	3.9646 / 3.9644	3B		
4⅛-12 or 4.125-12	UN	2A	4.0689 / 4.0683	4.0328 / 4.0319	4.0624 / 4.0630	4.0624 / 4.0618	4.0444 / 4.0453	4.1230 / 4.1228	4.1116 / 4.1118		4.1250 / 4.1259	4.0709 / 4.0715	4.1155 / 4.1146	4.0794 / 4.0788	4.0794 / 4.0800	4.0350 / 4.0352	4.0530 / 4.0528	2B	UN	4⅛-12 or 4.125-12
		3A	4.0709 / 4.0703	4.0348 / 4.0339	4.0660 / 4.0666	4.0660 / 4.0654	4.0480 / 4.0489	4.1250 / 4.1248	4.1136 / 4.1138		4.1250 / 4.1259	4.0709 / 4.0715	4.1134 / 4.1125	4.0773 / 4.0767	4.0773 / 4.0779	4.0350 / 4.0352	4.0448 / 4.0446	3B		
4⅛-16 or 4.125-16	UN	2A	4.0826 / 4.0820	4.0555 / 4.0546	4.0767 / 4.0773	4.0767 / 4.0761	4.0632 / 4.0641	4.1232 / 4.1230	4.1138 / 4.1140		4.1250 / 4.1259	4.0844 / 4.0850	4.1191 / 4.1182	4.0920 / 4.0914	4.0920 / 4.0926	4.0570 / 4.0570	4.0710 / 4.0708	2B	UN	4⅛-16 or 4.125-16
		3A	4.0844 / 4.0838	4.0573 / 4.0564	4.0800 / 4.0806	4.0800 / 4.0794	4.0665 / 4.0674	4.1250 / 4.1248	4.1156 / 4.1158		4.1250 / 4.1259	4.0844 / 4.0850	4.1172 / 4.1163	4.0901 / 4.0895	4.0901 / 4.0907	4.0570 / 4.0572	4.0658 / 4.0656	3B		
4¼-4 or 4.250-4	UN	2A	4.0842 / 4.0836	3.9759 / 3.9744	4.0727 / 4.0733	4.0727 / 4.0721	4.0186 / 4.0201	4.2466 / 4.2464	4.2228 / 4.2230		4.2500 / 4.2515	4.0876 / 4.0882	4.2108 / 4.2093	4.1025 / 4.1019	4.1025 / 4.1031	3.9790 / 3.9792	4.0170 / 4.0168	2B	UN	4¼-4 or 4.250-4
		3A	4.0876 / 4.0870	3.9793 / 3.9778	4.0790 / 4.0796	4.0790 / 4.0784	4.0249 / 4.0264	4.2500 / 4.2498	4.2262 / 4.2264		4.2500 / 4.2515	4.0876 / 4.0882	4.2071 / 4.2056	4.0988 / 4.0982	4.0988 / 4.0994	3.9790 / 3.9792	4.0094 / 4.0092	3B		
4¼-6 or 4.250-6	UN	2A	4.1387 / 4.1381	4.0665 / 4.0652	4.1286 / 4.1292	4.1286 / 4.1280	4.0925 / 4.0938	4.2470 / 4.2468	4.2288 / 4.2290		4.2500 / 4.2513	4.1417 / 4.1423	4.2270 / 4.2257	4.1548 / 4.1542	4.1548 / 4.1554	4.0700 / 4.0702	4.1000 / 4.0998	2B	UN	4¼-6 or 4.250-6
		3A	4.1417 / 4.1411	4.0695 / 4.0682	4.1342 / 4.1348	4.1342 / 4.1336	4.0981 / 4.0994	4.2500 / 4.2498	4.2318 / 4.2320		4.2500 / 4.2513	4.1417 / 4.1423	4.2237 / 4.2224	4.1515 / 4.1509	4.1515 / 4.1521	4.0700 / 4.0702	4.0896 / 4.0894	3B		
4¼-12 or 4.250-12	UN	2A	4.1939 / 4.1933	4.1578 / 4.1569	4.1874 / 4.1880	4.1874 / 4.1868	4.1694 / 4.1703	4.2480 / 4.2478	4.2366 / 4.2368		4.2500 / 4.2509	4.1959 / 4.1965	4.2405 / 4.2396	4.2044 / 4.2038	4.2044 / 4.2050	4.1600 / 4.1602	4.1780 / 4.1778	2B	UN	4¼-12 or 4.250-12
		3A	4.1959 / 4.1953	4.1598 / 4.1589	4.1910 / 4.1916	4.1910 / 4.1904	4.1730 / 4.1739	4.2500 / 4.2498	4.2386 / 4.2388		4.2500 / 4.2509	4.1959 / 4.1965	4.2384 / 4.2375	4.2023 / 4.2017	4.2023 / 4.2029	4.1600 / 4.1602	4.1698 / 4.1696	3B		
4¼-16 or 4.250-16	UN	2A	4.2076 / 4.2070	4.1805 / 4.1796	4.2017 / 4.2023	4.2017 / 4.2011	4.1882 / 4.1891	4.2482 / 4.2480	4.2388 / 4.2390		4.2500 / 4.2509	4.2094 / 4.2100	4.2441 / 4.2432	4.2170 / 4.2164	4.2170 / 4.2176	4.1820 / 4.1822	4.1960 / 4.1958	2B	UN	4¼-16 or 4.250-16
		3A	4.2094 / 4.2088	4.1823 / 4.1814	4.2050 / 4.2056	4.2050 / 4.2044	4.1915 / 4.1924	4.2500 / 4.2498	4.2406 / 4.2408		4.2500 / 4.2509	4.2094 / 4.2100	4.2422 / 4.2413	4.2151 / 4.2145	4.2151 / 4.2157	4.1820 / 4.1822	4.1908 / 4.1906	3B		
4⅜-6 or 4.375-6	UN	2A	4.2637 / 4.2631	4.1915 / 4.1902	4.2536 / 4.2542	4.2536 / 4.2530	4.2175 / 4.2188	4.3720 / 4.3718	4.3538 / 4.3540		4.3750 / 4.3763	4.2667 / 4.2673	4.3521 / 4.3508	4.2799 / 4.2793	4.2799 / 4.2805	4.1950 / 4.1952	4.2250 / 4.2248	2B	UN	4⅜-6 or 4.375-6
		3A	4.2667 / 4.2661	4.1945 / 4.1932	4.2591 / 4.2597	4.2591 / 4.2585	4.2230 / 4.2243	4.3750 / 4.3748	4.3568 / 4.3570		4.3750 / 4.3763	4.2667 / 4.2673	4.3488 / 4.3475	4.2766 / 4.2760	4.2766 / 4.2772	4.1950 / 4.1952	4.2146 / 4.2144	3B		

Screw-thread dimensional table. Column headings give nominal thread sizes (fractional "or" decimal). Row groups: upper half internal thread (UN, classes 2B / 3B); lower half external thread (classes 2A / 3A, UN). Each cell lists the stacked values reading top-to-bottom.

	4⅜-12 or 4.375-12	4⅜-16 or 4.375-16	4½-4 or 4.500-4	4½-6 or 4.500-6	4½-12 or 4.500-12	4½-16 or 4.500-16	4⅝-6 or 4.625-6	4⅝-12 or 4.625-12	4⅝-16 or 4.625-16	4¾-4 or 4.750-4	4¾-6 or 4.750-6	4¾-12 or 4.750-12	4¾-16 or 4.750-16	4⅞-6 or 4.875-6	4⅞-12 or 4.875-12	4⅞-16 or 4.875-16
	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN
	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B	2B 3B
1	3030 3028 2948 2946	3210 3208 3158 3156	2670 2668 2594 2592	3500 3498 3396 3394	4280 4278 4198 4196	4460 4458 4408 4406	47500 47475 46460 46435	55300 55275 54480 54455	57100 57075 56580 56555	51700 51675 50940 50915	60000 59975 58960 58935	67800 67775 66980 66955	69600 69575 69080 69055	72500 72475 71460 71435	80300 80275 79480 79455	82100 82075 81580 81555
2	2852 2852 2850 2852	3070 3072 3070 3072	2290 2292 2290 2292	3200 3202 3200 3202	4100 4102 4100 4102	4320 4322 4320 4322	44500 44525 44500 44525	53500 53525 53500 53525	55700 55725 55700 55725	47900 47925 47900 47925	57000 57025 57000 57025	66000 66025 66000 66025	68200 68225 68200 68225	69500 69525 69500 69525	78500 78525 78500 78525	80700 80725 80700 80725
3	3294 3300 3273 3279	3420 3426 3401 3407	3527 3533 3489 3495	4050 4056 4016 4022	4544 4550 4523 4529	4670 4676 4651 4657	5300 5306 5267 5273	5796 5802 5775 5781	5923 5929 5903 5909	6029 6035 5990 5996	6551 6557 6518 6524	7046 7052 7025 7031	7173 7179 7153 7159	7802 7808 7768 7774	8296 8302 8275 8281	8423 8429 8403 8409
4	3294 3298 3273 3267	3420 3414 3401 3395	3527 3521 3489 3483	4050 4044 4016 4010	4544 4538 4523 4517	4670 4664 4651 4645	5300 5294 5267 5261	5796 5790 5775 5769	5923 5917 5903 5897	6029 6023 5990 5984	6551 6545 6518 6512	7046 7040 7025 7019	7173 7167 7153 7147	7802 7796 7768 7762	8296 8290 8275 8269	8423 8417 8403 8397
5	3655 3646 3634 3625	3691 3682 3672 3663	4610 4595 4572 4557	4772 4759 4738 4725	4905 4896 4884 4875	4941 4932 4922 4913	6022 6009 5989 5976	6157 6148 6136 6127	6194 6185 6174 6165	7112 7097 7073 7058	7273 7260 7240 7227	7407 7398 7386 7377	7444 7435 7424 7415	8524 8511 8490 8477	8657 8648 8636 8627	8694 8685 8674 8665
6	3209 3209 3209 3215	3344 3350 3344 3350	3376 3382 3376 3382	3917 3923 3917 3923	4459 4465 4459 4465	4594 4600 4594 4600	5167 5173 5167 5173	5709 5715 5709 5715	5844 5850 5844 5850	5676 5682 5676 5682	6417 6423 6417 6423	6959 6965 6959 6965	7094 7100 7094 7100	7667 7673 7667 7673	8209 8215 8209 8215	8344 8350 8344 8350
7	3750 3759 3750 3759	3750 3759 3750 3759	5000 5015 5000 5015	5000 5013 5000 5013	5000 5009 5000 5009	5000 5009 5000 5009	6250 6263 6250 6263	6250 6259 6250 6269	6250 6259 6250 6259	6250 6259 6250 6259	7500 7513 7500 7513	7500 7509 7500 7509	7500 7509 7500 7509	8750 8763 8750 8763	8750 8759 8750 8759	8750 8759 8750 8759
	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A
8	3616 3618 3636 3638	3638 3640 3656 3658	4727 4729 4762 4764	4787 4789 4818 4820	4866 4808 4886 4888	4888 4890 4906 4908	60370 60395 60680 60705	61160 61185 61360 61385	61380 61405 61560 61585	72270 72295 72620 72645	72870 72895 73180 73205	73660 73685 73860 73885	73880 73905 74060 74085	85370 85395 85680 85705	86160 86185 86360 86385	86380 86405 86560 86585
9	3730 3728 3750 3748	3732 3730 3750 3748	4965 4963 5000 4998	4969 4967 5000 4998	4980 4978 5000 4998	4982 4980 5000 4998	62190 62165 62500 62475	62275 62500 62500 62475	62305 62295 62500 62475	74650 74625 75000 74.75	74690 74665 75000 74975	74800 74775 75000 74975	74820 74795 75000 74975	87190 87165 87500 87475	87275 87295 87500 87475	87320 87295 87500 87475
10	2944 2953 2980 2959	3132 3141 3165 3174	3084 3099 2748 2763	3423 3436 3479 3492	4194 4203 4230 4239	4382 4391 4415 4424	4672 4685 4729 4742	5442 5451 5479 5488	5630 5639 5664 5673	5183 5198 5247 5262	5922 5935 5979 5992	6692 6701 6729 6738	6880 6889 6914 6923	7942 7951 7979 7988	8130 8139 8164 8173	8130 8139 8164 8173
11	3124 3118 3160 3154	3267 3261 3300 3294	3225 3219 3289 3283	3784 3778 3840 3834	4374 4368 4410 4404	4517 4511 4550 4544	5033 5027 5090 5084	5622 5616 5659 5653	5765 5759 5799 5793	5724 5718 5788 5782	6283 6277 6340 6334	6872 6866 6909 6903	7015 7009 7049 7043	8122 8116 8159 8153	8265 8259 8299 8293	8265 8259 8299 8293
12	3124 3130 3160 3166	3267 3273 3300 3306	3225 3231 3289 3295	3784 3790 3840 3846	4374 4380 4410 4416	4517 4523 4550 4556	5033 5039 5090 5096	5622 5628 5659 5665	5765 5771 5799 5805	5724 5730 5788 5794	6283 6289 6340 6346	6872 6878 6909 6915	7015 7021 7049 7055	8122 8128 8159 8165	8265 8271 8299 8305	8265 8271 8299 8305
13	2828 2819 2848 2839	3055 3046 3073 3064	2258 2243 2293 2278	3164 3151 3195 3182	4078 4069 4098 4089	4305 4296 4323 4314	4414 4401 4445 4432	5328 5319 5348 5339	5555 5546 5573 5564	4758 4743 4793 4778	5664 5651 5695 5682	6578 6569 6598 6589	6805 6796 6823 6814	7828 7819 7848 7839	8055 8046 8073 8064	8055 8046 8073 8064
14	3189 3183 3209 3203	3326 3320 3344 3338	3341 3335 3376 3370	3886 3880 3917 3911	4439 4433 4459 4453	4576 4570 4594 4588	5136 5130 5167 5161	5689 5683 5709 5703	5826 5820 5844 5838	5841 5835 5876 5870	6386 6380 6417 6411	6939 6933 6959 6953	7076 7070 7094 7088	8189 8183 8209 8203	8326 8320 8344 8338	8326 8320 8344 8338
	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A	2A 3A
	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN	UN
	4⅜-12 or 4.375-12	4⅜-16 or 4.375-16	4½-4 or 4.500-4	4½-6 or 4.500-6	4½-12 or 4.500-12	4½-16 or 4.500-16	4⅝-6 or 4.625-6	4⅝-12 or 4.625-12	4⅝-16 or 4.625-16	4¾-4 or 4.750-4	4¾-6 or 4.750-6	4¾-12 or 4.750-12	4¾-16 or 4.750-16	4⅞-6 or 4.875-6	4⅞-12 or 4.875-12	4⅞-16 or 4.875-16

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

			Gages for external threads								Gages for internal threads										
			X thread ring gages		LO, classes 1A and 2A, NOT GO, class 3A			Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		Pitch diameter		Minor diameter	GO	NOT GO		GO		Major diameter	Pitch diameter (III)		GO	NOT GO			
Nominal size and threads per inch	Series designation	Class	Pitch diameter	Minor diameter	Plus tolerance gage	Minus tolerance gage	Minor diameter		Semifinished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Minus tolerance gage	Plus tolerance gage			Class	Series designation	Nominal size and threads per inch
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
5–4 or 5.000–4	UN	2A	4.8340	4.7257	4.8221	4.8221	4.7680	4.99640	4.97260		5.0000	4.8376	4.9613	4.8530	4.8530	4.72900	4.76700	2B	UN	5–4 or 5.000–4
			4.8334	4.7242	4.8227	4.8215	4.7695	4.99615	4.97285		5.0015	4.8382	4.9598	4.8524	4.8536	4.72925	4.76675			
		3A	4.8376	4.7293	4.8287	4.8287	4.7746	5.00000	4.97620		5.0000	4.8376	4.9575	4.8492	4.8492	4.72900	4.75940	3B		
			4.8370	4.7278	4.8293	4.8281	4.7761	4.99975	4.97645		5.0015	4.8382	4.9560	4.8486	4.8498	4.72925	4.75915			
5–6 or 5.000–6	UN	2A	4.8886	4.8164	4.8781	4.8781	4.8420	4.99690	4.97870		5.0000	4.8917	4.9775	4.9053	4.9053	4.82000	4.85000	2B	UN	5–6 or 5.000–6
			4.8880	4.8151	4.8787	4.8775	4.8433	4.99665	4.97895		5.0013	4.8923	4.9762	4.9047	4.9059	4.82025	4.84975			
		3A	4.8917	4.8195	4.8839	4.8839	4.8478	5.00000	4.98180		5.0000	4.8917	4.9741	4.9019	4.9019	4.82000	4.83960	3B		
			4.8911	4.8182	4.8845	4.8833	4.8491	4.99975	4.98205		5.0013	4.8923	4.9728	4.9013	4.9025	4.82025	4.83935			
5–12 or 5.000–12	UN	2A	4.9439	4.9078	4.9372	4.9372	4.9192	4.99800	4.98660		5.0000	4.9459	4.9907	4.9546	4.9546	4.91000	4.92500	2B	UN	5–12 or 5.000–12
			4.9433	4.9069	4.9378	4.9366	4.9201	4.99775	4.98685		5.0009	4.9465	4.9898	4.9540	4.9552	4.91025	4.92775			
		3A	4.9459	4.9098	4.9409	4.9409	4.9229	5.00000	4.98860		5.0000	4.9459	4.9886	4.9525	4.9525	4.91000	4.91980	3B		
			4.9453	4.9089	4.9415	4.9403	4.9238	4.99975	4.98885		5.0009	4.9465	4.9877	4.9519	4.9531	4.91025	4.91955			
5–16 or 5.000–16	UN	2A	4.9576	4.9305	4.9515	4.9515	4.9380	4.99820	4.98880		5.0000	4.9594	4.9944	4.9673	4.9673	4.93200	4.94600	2B	UN	5–16 or 5.000–16
			4.9570	4.9296	4.9521	4.9509	4.9389	4.99795	4.98905		5.0009	4.9600	4.9935	4.9667	4.9679	4.93225	4.94575			
		3A	4.9594	4.9323	4.9549	4.9549	4.9414	5.00000	4.99060		5.0000	4.9594	4.9924	4.9653	4.9653	4.93200	4.94080	3B		
			4.9588	4.9314	4.9555	4.9543	4.9423	4.99975	4.99085		5.0009	4.9600	4.9915	4.9647	4.9659	4.93225	4.94055			
5⅛–12 or 5.125–12	UN	2A	5.0689	5.0328	5.0622	5.0622	5.0442	5.12300	5.11160		5.1250	5.0709	5.1157	5.0796	5.0796	5.03500	5.05300	2B	UN	5⅛–12 or 5.125–12
			5.0683	5.0319	5.0628	5.0616	5.0451	5.12275	5.11185		5.1259	5.0715	5.1148	5.0790	5.0802	5.03525	5.05275			
		3A	5.0709	5.0348	5.0659	5.0659	5.0479	5.12500	5.11360		5.1250	5.0709	5.1136	5.0775	5.0775	5.03500	5.04480	3B		
			5.0703	5.0339	5.0665	5.0653	5.0488	5.12475	5.11385		5.1259	5.0715	5.1127	5.0769	5.0781	5.03525	5.04455			
5⅛–16 or 5.125–16	UN	2A	5.0826	5.0555	5.0765	5.0765	5.0630	5.12320	5.11380		5.1250	5.0844	5.1194	5.0923	5.0923	5.05700	5.07100	2B	UN	5⅛–16 or 5.125–16
			5.0820	5.0546	5.0771	5.0759	5.0639	5.12295	5.11405		5.1259	5.0850	5.1185	5.0917	5.0929	5.05725	5.07075			
		3A	5.0844	5.0573	5.0799	5.0799	5.0664	5.12500	5.11560		5.1250	5.0844	5.1174	5.0903	5.0903	5.05700	5.06580	3B		
			5.0838	5.0564	5.0805	5.0793	5.0673	5.12475	5.11585		5.1259	5.0850	5.1165	5.0897	5.0909	5.05725	5.06555			
5¼–4 or 5.250–4	UN	2A	5.0840	4.9757	5.0720	5.0720	5.0179	5.24640	5.22260		5.2500	5.0876	5.2115	5.1032	5.1032	4.97900	5.01700	2B	UN	5¼–4 or 5.250–4
			5.0834	4.9742	5.0726	5.0714	5.0194	5.24615	5.22285		5.2515	5.0882	5.2100	5.1026	5.1038	4.97925	5.01675			
		3A	5.0876	4.9793	5.0786	5.0786	5.0245	5.25000	5.22620		5.2500	5.0876	5.2076	5.0993	5.0993	4.97900	5.00940	3B		
			5.0870	4.9778	5.0792	5.0780	5.0260	5.24975	5.22645		5.2515	5.0882	5.2061	5.0987	5.0999	4.97925	5.00915			
5¼–12 or 5.250–12	UN	2A	5.1939	5.1578	5.1872	5.1872	5.1692	5.24800	5.23660		5.2500	5.1959	5.2407	5.2046	5.2046	5.16000	5.17800	2B	UN	5¼–12 or 5.250–12
			5.1933	5.1569	5.1878	5.1866	5.1701	5.24775	5.23685		5.2509	5.1965	5.2398	5.2040	5.2052	5.16025	5.17775			
		3A	5.1959	5.1598	5.1909	5.1909	5.1729	5.25000	5.23860		5.2500	5.1959	5.2386	5.2025	5.2025	5.16000	5.16980	3B		
			5.1953	5.1589	5.1915	5.1903	5.1738	5.24975	5.23885		5.2509	5.1965	5.2377	5.2019	5.2031	5.16025	5.16955			
5¼–16 or 5.250–16	UN	2A	5.2076	5.1805	5.2015	5.2015	5.1880	5.24820	5.23880		5.2500	5.2094	5.2444	5.2173	5.2173	5.18200	5.19600	2B	UN	5¼–16 or 5.250–16
			5.2070	5.1796	5.2021	5.2009	5.1889	5.24795	5.23905		5.2509	5.2100	5.2435	5.2167	5.2179	5.18225	5.19575			
		3A	5.2094	5.1823	5.2049	5.2049	5.1914	5.25000	5.24060		5.2500	5.2094	5.2424	5.2153	5.2153	5.18200	5.19080	3B		
			5.2088	5.1814	5.2055	5.2043	5.1923	5.24975	5.24085		5.2509	5.2100	5.2415	5.2147	5.2159	5.18225	5.19055			
5⅜–12 or 5.375–12	UN	2A	5.3189	5.2828	5.3122	5.3122	5.2942	5.37300	5.36160		5.3750	5.3209	5.3657	5.3296	5.3296	5.28500	5.30300	2B	UN	5⅜–12 or 5.375–12
			5.3183	5.2819	5.3128	5.3116	5.2951	5.37275	5.36185		5.3759	5.3215	5.3648	5.3290	5.3302	5.28525	5.30275			
		3A	5.3209	5.2848	5.3159	5.3159	5.2979	5.37500	5.36360		5.3750	5.3209	5.3636	5.3275	5.3275	5.28500	5.29480	3B		
			5.3203	5.2839	5.3165	5.3153	5.2988	5.37475	5.36385		5.3759	5.3215	5.3627	5.3269	5.3281	5.28525	5.29455			

Thread dimension table. Internal thread classes (top): UN — 2B, 3B. External thread classes (bottom): 2A, 3A — UN.

Size								(gap)							
5⅜-16 or 5.375-16	5.32100	5.30700	5.3423	5.3423	5.3694	5.3344	5.3750		5.36380	5.37320	5.3130	5.3265	5.3265	5.3055	5.3326
	5.32075	5.30700	5.3429	5.3417	5.3685	5.3350	5.3759		5.36405	5.37295	5.3139	5.3259	5.3271	5.3046	5.3320
	5.31580	5.30700	5.3403	5.3403	5.3674	5.3344	5.3750		5.36560	5.37500	5.3164	5.3285	5.3299	5.3073	5.3344
	5.31555	5.30725	5.3409	5.3397	5.3665	5.3350	5.3759		5.36585	5.37475	5.3173	5.3293	5.3305	5.3064	5.3338
5½-4 or 5.500-4	5.26700	5.22900	5.3534	5.3534	5.4617	5.3376	5.5000		5.47260	5.49640	5.2678	5.3219	5.3219	5.2257	5.3340
	5.26675	5.22900	5.3540	5.3528	5.4602	5.3382	5.5015		5.47285	5.49615	5.2693	5.3213	5.3225	5.2242	5.3334
	5.25940	5.22900	5.3494	5.3494	5.4577	5.3376	5.5000		5.47620	5.50000	5.2744	5.3285	5.3285	5.2293	5.3376
	5.25915	5.22925	5.3500	5.3488	5.4562	5.3382	5.5015		5.47645	5.49975	5.2759	5.3279	5.3291	5.2278	5.3370
5½-12 or 5.500-12	5.42800	5.41000	5.4546	5.4546	5.4907	5.4459	5.5000		5.48660	5.49900	5.4192	5.4372	5.4372	5.4078	5.4439
	5.42775	5.41025	5.4552	5.4540	5.4898	5.4465	5.5009		5.48685	5.49775	5.4201	5.4366	5.4378	5.4069	5.4433
	5.41980	5.41000	5.4525	5.4525	5.4886	5.4459	5.5000		5.48860	5.50000	5.4229	5.4409	5.4409	5.4098	5.4459
	5.41955	5.41025	5.4519	5.4519	5.4877	5.4465	5.5009		5.48885	5.49975	5.4238	5.4403	5.4415	5.4089	5.4453
5½-16 or 5.500-16	5.44600	5.43200	5.4673	5.4673	5.4944	5.4594	5.5000		5.48880	5.49820	5.4380	5.4515	5.4515	5.4305	5.4576
	5.44575	5.43225	5.4679	5.4667	5.4935	5.4600	5.5009		5.48905	5.49795	5.4389	5.4509	5.4521	5.4296	5.4570
	5.44080	5.43200	5.4653	5.4653	5.4924	5.4594	5.5000		5.49060	5.50000	5.4414	5.4549	5.4549	5.4323	5.4594
	5.44055	5.43225	5.4659	5.4647	5.4915	5.4600	5.5009		5.49085	5.49975	5.4423	5.4543	5.4555	5.4314	5.4588
5⅝-12 or 5.625-12	5.55300	5.53500	5.5799	5.5799	5.6160	5.5709	5.6250		5.61150	5.62290	5.5439	5.5619	5.5619	5.5327	5.5688
	5.55275	5.53525	5.5805	5.5793	5.6151	5.5715	5.6259		5.61175	5.62265	5.5448	5.5613	5.5625	5.5318	5.5682
	5.54480	5.53500	5.5776	5.5776	5.6137	5.5709	5.6250		5.61360	5.62500	5.5477	5.5657	5.5657	5.5348	5.5709
	5.54455	5.53525	5.5782	5.5770	5.6128	5.5715	5.6259		5.61385	5.62475	5.5486	5.5651	5.5663	5.5339	5.5703
5⅝-16 or 5.625-16	5.57100	5.55700	5.5925	5.5925	5.6196	5.5844	5.6250		5.61370	5.62310	5.5628	5.5763	5.5763	5.5554	5.5825
	5.57075	5.55725	5.5931	5.5919	5.6187	5.5850	5.6259		5.61395	5.62285	5.5637	5.5757	5.5769	5.5545	5.5819
	5.56580	5.55700	5.5905	5.5905	5.6176	5.5844	5.6250		5.61560	5.62500	5.5662	5.5797	5.5797	5.5573	5.5844
	5.56555	5.55725	5.5911	5.5899	5.6167	5.5850	5.6259		5.61585	5.62475	5.5671	5.5791	5.5803	5.5564	5.5838
5¾-4 or 5.750-4	5.51700	5.47900	5.6035	5.6035	5.7118	5.5876	5.7500		5.72250	5.74630	5.5176	5.5717	5.5717	5.4756	5.5839
	5.51675	5.47925	5.6041	5.6029	5.7103	5.5882	5.7515		5.72275	5.74605	5.5191	5.5711	5.5723	5.4741	5.5833
	5.50940	5.47900	5.5995	5.5995	5.7078	5.5876	5.7500		5.72620	5.75000	5.5243	5.5784	5.5784	5.4793	5.5876
	5.50915	5.47925	5.6001	5.5989	5.7063	5.5882	5.7515		5.72645	5.74975	5.5258	5.5778	5.5790	5.4778	5.5870
5¾-12 or 5.750-12	5.67800	5.66000	5.7049	5.7049	5.7410	5.6959	5.7500		5.73650	5.74790	5.6689	5.6869	5.6869	5.6577	5.6938
	5.67775	5.66025	5.7055	5.7043	5.7401	5.6965	5.7509		5.73675	5.74765	5.6698	5.6863	5.6875	5.6568	5.6932
	5.66980	5.66000	5.7026	5.7026	5.7387	5.6959	5.7500		5.73860	5.75000	5.6727	5.6907	5.6907	5.6598	5.6959
	5.66955	5.66025	5.7032	5.7020	5.7378	5.6965	5.7509		5.73885	5.74975	5.6736	5.6901	5.6913	5.6589	5.6953
5¾-16 or 5.750-16	5.69600	5.68200	5.7175	5.7175	5.7446	5.7094	5.7500		5.73870	5.74810	5.6878	5.7013	5.7013	5.6804	5.7075
	5.69575	5.68225	5.7181	5.7169	5.7437	5.7100	5.7509		5.73895	5.74785	5.6887	5.7007	5.7019	5.6795	5.7069
	5.69080	5.68200	5.7155	5.7155	5.7426	5.7094	5.7500		5.74060	5.75000	5.6912	5.7047	5.7047	5.6823	5.7094
	5.69055	5.68225	5.7161	5.7149	5.7417	5.7100	5.7509		5.74085	5.74975	5.6921	5.7041	5.7053	5.6814	5.7088
5⅞-12 or 5.875-12	5.80300	5.78500	5.8299	5.8299	5.8660	5.8209	5.8750		5.86150	5.87290	5.7939	5.8119	5.8119	5.7827	5.8188
	5.80275	5.78525	5.8305	5.8293	5.8651	5.8215	5.8759		5.86175	5.87265	5.7948	5.8113	5.8125	5.7818	5.8182
	5.79480	5.78500	5.8276	5.8276	5.8637	5.8209	5.8750		5.86360	5.87500	5.7977	5.8157	5.8157	5.7848	5.8209
	5.79455	5.78525	5.8282	5.8270	5.8628	5.8215	5.8759		5.86385	5.87475	5.7986	5.8151	5.8163	5.7839	5.8203
5⅞-16 or 5.875-16	5.82100	5.80700	5.8425	5.8425	5.8696	5.8344	5.8750		5.86370	5.87310	5.8128	5.8263	5.8263	5.8054	5.8325
	5.82075	5.80725	5.8431	5.8419	5.8687	5.8350	5.8759		5.86395	5.87285	5.8137	5.8257	5.8269	5.8045	5.8319
	5.81580	5.80700	5.8405	5.8405	5.8676	5.8344	5.8750		5.86560	5.87500	5.8162	5.8297	5.8297	5.8073	5.8344
	5.81555	5.80725	5.8411	5.8399	5.8667	5.8350	5.8759		5.86585	5.87475	5.8171	5.8291	5.8303	5.8064	5.8338
6-4 or 6.000-4	5.76700	5.72900	5.8537	5.8537	5.9620	5.8376	6.0000		5.97250	5.99630	5.7674	5.8215	5.8215	5.7256	5.8339
	5.76675	5.72925	5.8543	5.8531	5.9605	5.8382	6.0015		5.97275	5.99605	5.7689	5.8209	5.8221	5.7241	5.8333
	5.75940	5.72900	5.8496	5.8496	5.9579	5.8376	6.0000		5.97620	6.00000	5.7742	5.8283	5.8283	5.7293	5.8376
	5.75915	5.72925	5.8502	5.8490	5.9564	5.8382	6.0015		5.97645	5.99975	5.7757	5.8277	5.8289	5.7278	5.8370
6-12 or 6.000-12	5.92800	5.91000	5.9549	5.9549	5.9910	5.9459	6.0000		5.98650	5.99790	5.9189	5.9369	5.9369	5.9077	5.9438
	5.92775	5.91025	5.9555	5.9543	5.9901	5.9465	6.0009		5.98675	5.99765	5.9198	5.9363	5.9375	5.9068	5.9432
	5.91980	5.91000	5.9526	5.9526	5.9887	5.9459	6.0000		5.98860	6.00000	5.9227	5.9407	5.9407	5.9098	5.9459
	5.91955	5.91025	5.9532	5.9520	5.9878	5.9465	6.0009		5.98885	5.99975	5.9236	5.9401	5.9413	5.9089	5.9453
6-16 or 6.000-16	5.94600	5.93200	5.9675	5.9675	5.9946	5.9594	6.0000		5.98870	5.99810	5.9378	5.9513	5.9513	5.9304	5.9575
	5.94575	5.93200	5.9681	5.9669	5.9937	5.9600	6.0009		5.98895	5.99785	5.9387	5.9507	5.9519	5.9295	5.9569
	5.94080	5.93200	5.9655	5.9655	5.9926	5.9594	6.0000		5.99060	6.00000	5.9412	5.9547	5.9547	5.9323	5.9594
	5.94055	5.93225	5.9661	5.9649	5.9917	5.9600	6.0009		5.99085	5.99975	5.9421	5.9541	5.9553	5.9314	5.9588

TABLE III.13.—*Setting plug gages, Unified screw threads*

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage[a]			Plug for LO or NOT GO thread gage[a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO[a,b] thread gage		Plug for LO or [a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
0–80 or .060–80	UNF	2A	0.0561 .0558	0.0595 .0598	0.0514 .0513	0.0550 .0547	0.0584 .0587	0.0496 .0497	0.0496 .0495	0.0595 .0598	0.0595 .0600	0.0584 .0587	0.0584 .0587
		3A	.0566 .0563	.0600 .0603	.0519 .0518	.0560 .0557	.0594 .0597	.0506 .0507	.0506 .0505	.0600 .0603	.0600 .0603	.0594 .0597	.0594 .0597
1–64 or .073–64	UNC	2A	.0684 .0681	.0724 .0727	.0623 .0622	.0671 .0668	.0717 .0720	.0603 .0604	.0603 .0602	.0724 .0727	.0724 .0728	.0717 .0720	.0717 .0721
		3A	.0690 .0687	.0730 .0733	.0629 .0628	.0682 .0679	.0728 .0731	.0614 .0615	.0614 .0613	.0730 .0733	.0730 .0734	.0728 .0731	.0728 .0732
1–72 or .073–72	UNF	2A	.0687 .0684	.0724 .0727	.0634 .0633	.0675 .0672	.0715 .0718	.0615 .0616	.0615 .0614	.0724 .0727	.0724 .0727	.0715 .0718	.0715 .0718
		3A	.0693 .0690	.0730 .0733	.0640 .0639	.0686 .0683	.0726 .0729	.0626 .0627	.0626 .0625	.0730 .0733	.0730 .0733	.0726 .0729	.0726 .0729
2–56 or .086–56	UNC	2A	.0810 .0807	.0854 .0857	.0738 .0737	.0794 .0791	.0850 .0853	.0717 .0718	.0717 .0716	.0854 .0857	.0854 .0858	.0850 .0853	.0850 .0854
		3A	.0816 .0813	.0860 .0863	.0744 .0743	.0805 .0802	.0860 .0863	.0728 .0729	.0728 .0727	.0860 .0863	.0860 .0864	.0860 .0863	.0860 .0864
2–64 or .086–64	UNF	2A	.0814 .0811	.0854 .0857	.0753 .0752	.0801 .0798	.0847 .0850	.0733 .0734	.0733 .0732	.0854 .0857	.0854 .0858	.0847 .0850	.0847 .0851
		3A	.0820 .0817	.0860 .0863	.0759 .0758	.0812 .0809	.0858 .0861	.0744 .0745	.0744 .0743	.0860 .0863	.0860 .0864	.0858 .0861	.0858 .0862
3–48 or .099–48	UNC	2A	.0934 .0931	.0983 .0986	.0848 .0847	.0915 .0912	.0981 .0984	.0825 .0826	.0825 .0824	.0983 .0986	.0983 .0987	.0981 .0984	.0981 .0985
		3A	.0941 .0938	.0990 .0993	.0855 .0854	.0928 .0925	.0990 .0993	.0838 .0839	.0838 .0837	.0990 .0993	.0990 .0994	.0990 .0993	.0990 .0994
3–56 or .099–56	UNF	2A	.0939 .0936	.0983 .0986	.0867 .0866	.0922 .0919	.0978 .0981	.0845 .0846	.0845 .0844	.0983 .0986	.0983 .0987	.0978 .0981	.0978 .0982
		3A	.0946 .0943	.0990 .0993	.0874 .0873	.0935 .0932	.0990 .0993	.0858 .0859	.0858 .0857	.0990 .0993	.0990 .0994	.0990 .0993	.0990 .0994
4–40 or .112–40	UNC	2A	.1056 .1053	.1112 .1115	.0950 .0949	.1033 .1030	.1112 .1115	.0925 .0926	.0925 .0924	.1112 .1115	.1112 .1116	.1112 .1115	.1112 .1116
		3A	.1064 .1061	.1120 .1123	.0958 .0957	.1047 .1044	.1120 .1123	.0939 .0940	.0939 .0938	.1120 .1123	.1120 .1124	.1120 .1123	.1120 .1124
4–48 or .112–48	UNF	2A	.1064 .1061	.1113 .1116	.0978 .0977	.1044 .1041	.1110 .1113	.0954 .0955	.0954 .0953	.1113 .1116	.1113 .1117	.1110 .1113	.1110 .1114
		3A	.1071 .1068	.1120 .1123	.0985 .0984	.1057 .1054	.1120 .1123	.0967 .0968	.0967 .0966	.1120 .1123	.1120 .1124	.1120 .1123	.1120 .1124
5–40 or .125–40	UNC	2A	.1186 .1183	.1242 .1245	.1080 .1079	.1162 .1159	.1242 .1245	.1054 .1055	.1054 .1053	.1242 .1245	.1242 .1246	.1242 .1245	.1242 .1246
		3A	.1194 .1191	.1250 .1253	.1088 .1087	.1177 .1174	.1250 .1253	.1069 .1070	.1069 .1068	.1250 .1253	.1250 .1254	.1250 .1253	.1250 .1254
5–44 or .125–44	UNF	2A	.1191 .1188	.1243 .1246	.1095 .1094	.1168 .1165	.1240 .1243	.1070 .1071	.1070 .1069	.1243 .1246	.1243 .1247	.1240 .1243	.1240 .1244
		3A	.1198 .1195	.1250 .1253	.1102 .1101	.1181 .1178	.1250 .1253	.1083 .1084	.1083 .1082	.1250 .1253	.1250 .1254	.1250 .1253	.1250 .1254
6–32 or .138–32	UNC	2A	.1307 .1304	.1372 .1375	.1169 .1168	.1276 .1273	.1372 .1375	.1141 .1142	.1141 .1140	.1372 .1375	.1372 .1377	.1372 .1375	.1372 .1377
		3A	.1315 .1312	.1380 .1383	.1177 .1176	.1291 .1288	.1380 .1383	.1156 .1157	.1156 .1155	.1380 .1383	.1380 .1385	.1380 .1383	.1380 .1385
6–40 or .138–40	UNF	2A	.1316 .1313	.1372 .1375	.1210 .1209	.1292 .1289	.1372 .1375	.1184 .1185	.1184 .1183	.1372 .1375	.1372 .1376	.1372 .1375	.1372 .1376
		3A	.1324 .1321	.1380 .1383	.1218 .1217	.1306 .1303	.1380 .1383	.1198 .1199	.1198 .1197	.1380 .1383	.1380 .1384	.1380 .1383	.1380 .1384
8–32 or .164–32	UNC	2A	.1566 .1563	.1631 .1634	.1428 .1427	.1534 .1531	.1631 .1634	.1399 .1400	.1399 .1398	.1631 .1634	.1631 .1636	.1631 .1634	.1631 .1636
		3A	.1575 .1572	.1640 .1643	.1437 .1436	.1550 .1547	.1640 .1643	.1415 .1416	.1415 .1414	.1640 .1643	.1640 .1645	.1640 .1643	.1640 .1645
8–36 or .164–36	UNF	2A	.1572 .1569	.1632 .1635	.1452 .1451	.1544 .1541	.1632 .1635	.1424 .1425	.1424 .1423	.1632 .1635	.1632 .1636	.1632 .1635	.1632 .1636
		3A	.1580 .1577	.1640 .1643	.1460 .1459	.1559 .1556	.1640 .1643	.1439 .1440	.1439 .1438	.1640 .1643	.1640 .1644	.1640 .1643	.1640 .1644
10–24 or .190–24	UNC	2A	.1811 .1806	.1890 .1895	.1619 .1618	.1766 .1761	.1890 .1895	.1586 .1587	.1586 .1585	.1890 .1895	.1890 .1895	.1890 .1895	.1890 .1895
		3A	.1821 .1816	.1900 .1905	.1629 .1628	.1784 .1779	.1900 .1905	.1604 .1605	.1604 .1603	.1900 .1905	.1900 .1905	.1900 .1905	.1900 .1905

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage[a]			Plug for LO or NOT GO thread gage[a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO[a,b] thread gage		Plug for LO or[a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
10-32 or .190-32	UNF	2A	.1826 .1823	.1891 .1894	.1688 .1687	.1793 .1790	.1891 .1894	.1658 .1659	.1658 .1657	.1891 .1894	.1891 .1896	.1891 .1894	.1891 .1896
		3A	.1835 .1832	.1900 .1903	.1697 .1696	.1809 .1806	.1900 .1903	.1674 .1675	.1674 .1673	.1900 .1903	.1900 .1905	.1900 .1903	.1900 .1905
12-24 or .216-24	UNC	2A	.2071 .2066	.2150 .2155	.1879 .1878	.2025 .2020	.2150 .2155	.1845 .1846	.1845 .1844	.2150 .2155	.2150 .2155	.2150 .2155	.2150 .2155
		3A	.2081 .2076	.2160 .2165	.1889 .1888	.2043 .2038	.2160 .2165	.1863 .1864	.1863 .1862	.2160 .2165	.2160 .2165	.2160 .2165	.2160 .2165
12-28 or .216-28	UNF	2A	.2079 .2074	.2150 .2155	.1918 .1917	.2041 .2036	.2150 .2155	.1886 .1887	.1886 .1885	.2150 .2155	.2150 .2155	.2150 .2155	.2150 .2155
		3A	.2089 .2084	.2160 .2165	.1928 .1927	.2059 .2054	.2160 .2165	.1904 .1905	.1904 .1903	.2160 .2165	.2160 .2165	.2160 .2165	.2160 .2165
12-32 or .216-32	UNEF	2A	.2086 .2083	.2151 .2154	.1948 .1947	.2052 .2049	.2151 .2154	.1917 .1918	.1917 .1916	.2151 .2154	.2151 .2156	.2151 .2154	.2151 .2156
		3A	.2095 .2092	.2160 .2163	.1957 .1956	.2068 .2065	.2160 .2163	.1933 .1934	.1933 .1932	.2160 .2163	.2160 .2165	.2160 .2163	.2160 .2165
¼-20 or .250-20	UNC	1A	.2399 .2394	.2489 .2494	.2164 .2163	.2325 .2320	.2483 .2488	.2108 .2109	.2108 .2107	.2489 .2494	.2489 .2494	.2483 .2488	.2483 .2488
		2A	.2399 .2394	.2489 .2494	.2164 .2163	.2344 .2339	.2489 .2494	.2127 .2128	.2127 .2126	.2489 .2494	.2489 .2494	.2489 .2494	.2489 .2494
		3A	.2410 .2405	.2500 .2505	.2175 .2174	.2364 .2359	.2500 .2505	.2147 .2148	.2147 .2146	.2500 .2505	.2500 .2505	.2500 .2505	.2500 .2505
¼-28 or .250-28	UNF	1A	.2419 .2414	.2490 .2495	.2258 .2257	.2363 .2358	.2476 .2481	.2208 .2209	.2208 .2207	.2490 .2495	.2490 .2495	.2476 .2481	.2476 .2481
		2A	.2419 .2414	.2490 .2495	.2258 .2257	.2380 .2375	.2490 .2495	.2225 .2226	.2225 .2224	.2490 .2495	.2490 .2495	.2490 .2495	.2490 .2495
		3A	.2429 .2424	.2500 .2505	.2268 .2267	.2398 .2393	.2500 .2505	.2243 .2244	.2243 .2242	.2500 .2505	.2500 .2505	.2500 .2505	.2500 .2505
¼-32 or .250-32	UNEF	2A	.2425 .2422	.2490 .2493	.2287 .2286	.2390 .2387	.2489 .2492	.2255 .2256	.2255 .2254	.2490 .2493	.2490 .2495	.2489 .2492	.2489 .2494
		3A	.2435 .2432	.2500 .2503	.2297 .2296	.2408 .2405	.2500 .2503	.2273 .2274	.2273 .2272	.2500 .2503	.2500 .2505	.2500 .2503	.2500 .2505
⁵⁄₁₆-18 or .3125-18	UNC	1A	.3016 .3011	.3113 .3118	.2752 .2751	.2932 .2927	.3108 .3113	.2691 .2692	.2691 .2690	.3113 .3118	.3113 .3118	.3108 .3113	.3108 .3113
		2A	.3016 .3011	.3113 .3118	.2752 .2751	.2953 .2948	.3113 .3118	.2712 .2713	.2712 .2711	.3113 .3118	.3113 .3118	.3113 .3118	.3113 .3118
		3A	.3028 .3023	.3125 .3130	.2764 .2763	.2975 .2970	.3125 .3130	.2734 .2735	.2734 .2733	.3125 .3130	.3125 .3130	.3125 .3130	.3125 .3130
⁵⁄₁₆-20 or .3125-20	UN	2A	.3023 .3018	.3113 .3118	.2788 .2787	.2965 .2960	.3113 .3118	.2748 .2749	.2748 .2747	.3113 .3118	.3113 .3118	.3113 .3118	.3113 .3118
		3A	.3035 .3030	.3125 .3130	.2800 .2799	.2987 .2982	.3125 .3130	.2770 .2771	.2770 .2769	.3125 .3130	.3125 .3130	.3125 .3130	.3125 .3130
⁵⁄₁₆-24 or .3125-24	UNF	1A	.3035 .3030	.3114 .3119	.2843 .2842	.2968 .2963	.3100 .3105	.2788 .2789	.2788 .2787	.3114 .3119	.3114 .3119	.3100 .3105	.3100 .3105
		2A	.3035 .3030	.3114 .3119	.2843 .2842	.2986 .2981	.3114 .3119	.2806 .2807	.2806 .2805	.3114 .3119	.3114 .3119	.3114 .3119	.3114 .3119
		3A	.3046 .3041	.3125 .3130	.2854 .2853	.3007 .3002	.3125 .3130	.2827 .2828	.2827 .2826	.3125 .3130	.3125 .3130	.3125 .3130	.3125 .3130
⁵⁄₁₆-28 or .3125-28	UN	2A	.3044 .3039	.3115 .3120	.2883 .2882	.3004 .2999	.3115 .3120	.2849 .2850	.2849 .2848	.3115 .3120	.3115 .3120	.3115 .3120	.3115 .3120
		3A	.3054 .3049	.3125 .3130	.2893 .2892	.3022 .3017	.3125 .3130	.2867 .2868	.2867 .2866	.3125 .3130	.3125 .3130	.3125 .3130	.3125 .3130
⁵⁄₁₆-32 or .3125-32	UNEF	2A	.3050 .3047	.3115 .3118	.2912 .2911	.3015 .3012	.3114 .3117	.2880 .2881	.2880 .2879	.3115 .3118	.3115 .3120	.3114 .3117	.3114 .3119
		3A	.3060 .3057	.3125 .3128	.2922 .2921	.3033 .3030	.3125 .3128	.2898 .2899	.2898 .2897	.3125 .3128	.3125 .3130	.3125 .3128	.3125 .3130
⅜-16 or .375-16	UNC	1A	.3632 .3626	.3737 .3743	.3331 .3330	.3537 .3531	.3735 .3741	.3266 .3267	.3266 .3265	.3737 .3743	.3737 .3743	.3735 .3741	.3735 .3741
		2A	.3632 .3626	.3737 .3743	.3331 .3330	.3558 .3552	.3737 .3743	.3287 .3288	.3287 .3286	.3737 .3743	.3737 .3743	.3737 .3743	.3737 .3743
		3A	.3645 .3639	.3750 .3756	.3344 .3343	.3582 .3576	.3750 .3756	.3311 .3312	.3311 .3310	.3750 .3756	.3750 .3756	.3750 .3756	.3750 .3756
⅜-20 or .375-20	UN	2A	.3648 .3643	.3738 .3743	.3413 .3412	.3589 .3584	.3738 .3743	.3372 .3373	.3372 .3371	.3738 .3743	.3738 .3743	.3738 .3743	.3738 .3743
		3A	.3660 .3655	.3750 .3755	.3425 .3424	.3611 .3606	.3750 .3755	.3394 .3395	.3394 .3393	.3750 .3755	.3750 .3755	.3750 .3755	.3750 .3755

See footnotes at end of table.

Table III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO [a,b] thread gage		Plug for LO or [a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
⅜–24 or .375–24	UNF	1A	.3660	.3739	.3468	.3591	.3724	.3411	.3411	.3739	.3739	.3724	.3724
			.3655	.3744	.3467	.3586	.3729	.3412	.3410	.3744	.3744	.3729	.3729
		2A	.3660	.3739	.3468	.3610	.3739	.3430	.3430	.3739	.3739	.3739	.3739
			.3655	.3744	.3467	.3605	.3744	.3431	.3429	.3744	.3744	.3744	.3744
		3A	.3671	.3750	.3479	.3630	.3750	.3450	.3450	.3750	.3750	.3750	.3750
			.3666	.3755	.3478	.3625	.3755	.3451	.3449	.3755	.3755	.3755	.3755
⅜–28 or .375–28	UN	2A	.3668	.3739	.3507	.3626	.3739	.3471	.3471	.3739	.3739	.3739	.3739
			.3663	.3744	.3506	.3621	.3744	.3472	.3470	.3744	.3744	.3744	.3744
		3A	.3679	.3750	.3518	.3646	.3750	.3491	.3491	.3750	.3750	.3750	.3750
			.3674	.3755	.3517	.3641	.3755	.3492	.3490	.3755	.3755	.3755	.3755
⅜–32 or .375–32	UNEF	2A	.3675	.3740	.3537	.3638	.3737	.3503	.3503	.3740	.3740	.3737	.3737
			.3672	.3743	.3536	.3635	.3740	.3504	.3502	.3743	.3745	.3740	.3742
		3A	.3685	.3750	.3547	.3657	.3750	.3522	.3522	.3750	.3750	.3750	.3750
			.3682	.3753	.3546	.3654	.3753	.3523	.3521	.3753	.3755	.3753	.3755
										W and X tolerances		W and X tolerances	
⁷⁄₁₆–14 or .4375–14	UNC	1A	.4246	.4361	.38970	.4135	.4361	.38260	.38260	0.4361		0.4361	
			.4240	.4367	.38955	.4129	.4367	.38275	.38245	.4367		.4367	
		2A	.4246	.4361	.38970	.4159	.4361	.38500	.38500	.4361		.4361	
			.4240	.4367	.38955	.4153	.4367	.38515	.38485	.4367		.4367	
		3A	.4260	.4375	.39110	.4185	.4375	.38760	.38760	.4375		.4375	
			.4254	.4381	.39095	.4179	.4381	.38775	.38745	.4381		.4381	
⁷⁄₁₆–16 or .4375–16	UN	2A	.4256	.4361	.3955	.4180	.4361	.3909	.3909	.4361		.4361	
			.4250	.4367	.3954	.4174	.4367	.3910	.3908	.4367		.4367	
		3A	.4270	.4375	.3969	.4206	.4375	.3935	.3935	.4375		.4375	
			.4264	.4381	.3968	.4200	.4381	.3936	.3934	.4381		.4381	
⁷⁄₁₆–20 or .4375–20	UNF	1A	.4272	.4362	.4037	.4191	.4350	.3974	.3974	.4362		.4350	
			.4267	.4367	.4036	.4186	.4355	.3975	.3973	.4367		.4355	
		2A	.4272	.4362	.4037	.4212	.4362	.3995	.3995	.4362		.4362	
			.4267	.4367	.4036	.4207	.4367	.3996	.3994	.4367		.4367	
		3A	.4285	.4375	.4050	.4236	.4375	.4019	.4019	.4375		.4375	
			.4280	.4380	.4049	.4231	.4380	.4020	.4018	.4380		.4380	
⁷⁄₁₆–28 or .4375–28	UNEF	2A	.4293	.4364	.4132	.4251	.4364	.4096	.4096	.4364		.4364	
			.4288	.4369	.4131	.4246	.4369	.4097	.4095	.4369		.4369	
		3A	.4304	.4375	.4143	.4271	.4375	.4116	.4116	.4375		.4375	
			.4299	.4380	.4142	.4266	.4380	.4117	.4115	.4380		.4380	
⁷⁄₁₆–32 or .4375–32	UN	2A	.4300	.4365	.4162	.4263	.4362	.4128	.4128	.4365		.4362	
			.4297	.4368	.4161	.4260	.4367	.4129	.4127	.4368		.4367	
		3A	.4310	.4375	.4172	.4282	.4375	.4147	.4147	.4375		.4375	
			.4307	.4378	.4171	.4279	.4380	.4148	.4146	.4378		.4380	
½–13 or .500–13	UNC	1A	.4863	.4985	.44850	.4744	.4985	.44110	.44110	.4985		.4985	
			.4857	.4991	.44835	.4738	.4991	.44125	.44095	.4991		.4991	
		2A	.4863	.4985	.44850	.4768	.4985	.44350	.44350	.4985		.4985	
			.4857	.4991	.44835	.4762	.4991	.44365	.44335	.4991		.4991	
		3A	.4878	.5000	.45000	.4796	.5000	.44630	.44630	.5000		.5000	
			.4872	.5006	.44985	.4790	.5006	.44645	.44615	.5006		.5006	
½–16 or .500–16	UN	2A	.4881	.4986	.4580	.4804	.4986	.4533	.4533	.4986		.4986	
			.4875	.4992	.4579	.4798	.4992	.4534	.4532	.4992		.4992	
		3A	.4895	.5000	.4594	.4830	.5000	.4559	.4559	.5000		.5000	
			.4889	.5006	.4593	.4824	.5006	.4560	.4558	.5006		.5006	

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a] [b]	Plug for LO or NOT GO thread gage [a] [c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
½–20 or .500–20	UNF	1A	.4897 .4892	.4987 .4992	.4662 .4661	.4815 .4810	.4973 .4978	.4598 .4599	.4598 .4597	.4987 .4992	.4973 .4978
		2A	.4897 .4892	.4987 .4992	.4662 .4661	.4836 .4831	.4987 .4992	.4619 .4620	.4619 .4618	.4987 .4992	.4987 .4992
		3A	.4910 .4905	.5000 .5005	.4675 .4674	.4860 .4855	.5000 .5005	.4643 .4644	.4643 .4642	.5000 .5005	.5000 .5005
½–28 or .500–28	UNEF	2A	.4918 .4913	.4989 .4994	.4757 .4756	.4875 .4870	.4988 .4993	.4720 .4721	.4720 .4719	.4989 .4994	.4988 .4993
		3A	.4929 .4924	.5000 .5005	.4768 .4767	.4895 .4890	.5000 .5005	.4740 .4741	.4740 .4739	.5000 .5005	.5000 .5005
½–32 or .500–32	UN	2A	.4925 .4922	.4990 .4993	.4787 .4786	.4887 .4884	.4986 .4991	.4752 .4753	.4752 .4751	.4990 .4993	.4986 .4991
		3A	.4935 .4932	.5000 .5003	.4797 .4796	.4906 .4903	.5000 .5005	.4771 .4772	.4771 .4770	.5000 .5003	.5000 .5005
9⁄16–12 or .5625–12	UNC	1A	.5480 .5474	.5609 .5615	.5068 .5066	.5351 .5345	.5609 .5615	.4990 .4992	.4990 .4988	.5609 .5615	.5609 .5615
		2A	.5480 .5474	.5609 .5615	.5068 .5066	.5377 .5371	.5609 .5615	.5016 .5018	.5016 .5014	.5609 .5615	.5609 .5615
		3A	.5496 .5490	.5625 .5631	.5084 .5082	.5406 .5400	.5625 .5631	.5045 .5047	.5045 .5043	.5625 .5631	.5625 .5631
9⁄16–16 or .5625–16	UN	2A	.5506 .5500	.5611 .5617	.5205 .5203	.5429 .5423	.5611 .5617	.5158 .5160	.5158 .5156	.5611 .5617	.5611 .5617
		3A	.5520 .5514	.5625 .5631	.5219 .5217	.5455 .5449	.5625 .5631	.5184 .5186	.5184 .5182	.5625 .5631	.5625 .5631
9⁄16–18 or .5625–18	UNF	1A	.5514 .5509	.5611 .5616	.52500 .52485	.5423 .5418	.5599 .5604	.51820 .51835	.51820 .51805	.5611 .5616	.5599 .5604
		2A	.5514 .5509	.5611 .5616	.52500 .52485	.5446 .5441	.5611 .5616	.52050 .52065	.52050 .52035	.5611 .5616	.5611 .5616
		3A	.5528 .5523	.5625 .5630	.52640 .52625	.5471 .5466	.5625 .5630	.52300 .52315	.52300 .52285	.5625 .5630	.5625 .5630
9⁄16–20 or .5625–20	UN	2A	.5522 .5517	.5612 .5617	.52870 .52855	.5462 .5457	.5612 .5617	.52450 .52465	.52450 .52435	.5612 .5617	.5612 .5617
		3A	.5535 .5530	.5625 .5630	.53000 .52985	.5485 .5480	.5625 .5630	.52680 .52695	.52680 .52665	.5625 .5630	.5625 .5630
9⁄16–24 or .5625–24	UNEF	2A	.5534 .5529	.5613 .5618	.53420 .53405	.5483 .5478	.5613 .5618	.53030 .53045	.53030 .53015	.5613 .5618	.5613 .5618
		3A	.5546 .5541	.5625 .5630	.53540 .53525	.5505 .5500	.5625 .5630	.53250 .53265	.53250 .53235	.5625 .5630	.5625 .5630
9⁄16–28 or .5625–28	UN	2A	.5543 .5538	.5614 .5619	.53820 .53805	.5500 .5495	.5613 .5618	.53450 .53465	.53450 .53435	.5614 .5619	.5613 .5618
		3A	.5554 .5549	.5625 .5630	.53930 .53915	.5520 .5515	.5625 .5630	.53650 .53665	.53650 .53635	.5625 .5630	.5625 .5630
9⁄16–32 or .5625–32	UN	2A	.5550 .5545	.5615 .5620	.54120 .54105	.5512 .5507	.5611 .5616	.53770 .53785	.53770 .53755	.5615 .5620	.5611 .5616
		3A	.5560 .5555	.5625 .5630	.54220 .54205	.5531 .5526	.5625 .5630	.53960 .53975	.53960 .53945	.5625 .5630	.5625 .5630
⅝–11 or .625–11	UNC	1A	.6097 .6091	.6234 .6240	.5644 .5642	.5955 .5949	.6234 .6240	.5561 .5563	.5561 .5559	.6234 .6240	.6234 .6240
		2A	.6097 .6091	.6234 .6240	.5644 .5642	.5983 .5977	.6234 .6240	.5589 .5591	.5589 .5587	.6234 .6240	.6234 .6240
		3A	.6113 .6107	.6250 .6256	.5660 .5658	.6013 .6007	.6250 .6256	.5619 .5621	.5619 .5617	.6250 .6256	.6250 .6256
⅝–12 or .625–12	UN	2A	.6105 .6099	.6234 .6240	.5693 .5691	.6000 .5994	.6234 .6240	.5639 .5641	.5639 .5637	.6234 .6240	.6234 .6240
		3A	.6121 .6115	.6250 .6256	.5709 .5707	.6029 .6023	.6250 .6256	.5668 .5670	.5668 .5666	.6250 .6256	.6250 .6256

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [b][a]	Plug for LO or NOT GO thread gage [a]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
⅝–16 or .625–16	UN	2A	.6131 .6125	.6236 .6242	.5830 .5828	.6053 .6047	.6236 .6242	.5782 .5784	.5782 .5780	.6236 .6242	.6236 .6242
		3A	.6145 .6139	.6250 .6256	.5844 .5842	.6079 .6073	.6250 .6256	.5808 .5810	.5808 .5806	.6250 .6256	.6250 .6256
⅝–18 or .625–18	UNF	1A	.6139 .6134	.6236 .6241	.58750 .58735	.6046 .6041	.6222 .6227	.58050 .58065	.58050 .58035	.6236 .6241	.6222 .6227
		2A	.6139 .6134	.6236 .6241	.58750 .58735	.6069 .6064	.6236 .6241	.58280 .58295	.58280 .58265	.6236 .6241	.6236 .6241
		3A	.6153 .6148	.6250 .6255	.58890 .58875	.6095 .6090	.6250 .6255	.58540 .58555	.58540 .58525	.6250 .6255	.6250 .6255
⅝–20 or .625–20	UN	2A	.6147 .6142	.6237 .6242	.59120 .59105	.6086 .6081	.6237 .6242	.58690 .58705	.58690 .58675	.6237 .6242	.6237 .6242
		3A	.6160 .6155	.6250 .6255	.59250 .59235	.6110 .6105	.6250 .6255	.58930 .58945	.58930 .58915	.6250 .6255	.6250 .6255
⅝–24 or .625–24	UNEF	2A	.6159 .6154	.6238 .6243	.59670 .59655	.6107 .6102	.6238 .6243	.59270 .59285	.59270 .59255	.6238 .6243	.6238 .6243
		3A	.6171 .6166	.6250 .6255	.59790 .59775	.6129 .6124	.6250 .6255	.59490 .59505	.59490 .59475	.6250 .6255	.6250 .6255
⅝–28 or .625–28	UN	2A	.6168 .6163	.6239 .6244	.60070 .60055	.6124 .6119	.6237 .6242	.59690 .59705	.59690 .59675	.6239 .6244	.6237 .6242
		3A	.6179 .6174	.6250 .6255	.60180 .60165	.6145 .6140	.6250 .6255	.59900 .59915	.59900 .59885	.6250 .6255	.6250 .6255
⅝–32 or .625–32	UN	2A	.6174 .6169	.6239 .6244	.60360 .60345	.6135 .6130	.6234 .6239	.60000 .60015	.60000 .59985	.6239 .6244	.6234 .6239
		3A	.6185 .6180	.6250 .6255	.60470 .60455	.6155 .6150	.6250 .6255	.60200 .60215	.60200 .60185	.6250 .6255	.6250 .6255
1¹⁄₁₆–12 or .6875–12	UN	2A	.6730 .6724	.6859 .6865	.6318 .6316	.6625 .6619	.6859 .6865	.6264 .6266	.6264 .6262	.6859 .6865	.6859 .6865
		3A	.6746 .6740	.6875 .6881	.6334 .6332	.6654 .6648	.6875 .6881	.6293 .6295	.6293 .6291	.6875 .6881	.6875 .6881
1¹⁄₁₆–16 or .6875–16	UN	2A	.6756 .6750	.6861 .6867	.6455 .6453	.6678 .6672	.6861 .6867	.6407 .6409	.6407 .6405	.6861 .6867	.6861 .6867
		3A	.6770 .6764	.6875 .6881	.6469 .6467	.6704 .6698	.6875 .6881	.6433 .6435	.6433 .6431	.6875 .6881	.6875 .6881
1¹⁄₁₆–20 or .6875–20	UN	2A	.6772 .6767	.6862 .6867	.65370 .65355	.6711 .6706	.6862 .6867	.64940 .64955	.64940 .64925	.6862 .6867	.6862 .6867
		3A	.6785 .6780	.6875 .6880	.65500 .65485	.6735 .6730	.6875 .6880	.65180 .65195	.65180 .65165	.6875 .6880	.6875 .6880
1¹⁄₁₆–24 or .6875–24	UNEF	2A	.6784 .6779	.6863 .6868	.65920 .65905	.6732 .6727	.6863 .6868	.65520 .65535	.65520 .65505	.6863 .6868	.6863 .6868
		3A	.6796 .6791	.6875 .6880	.66040 .66025	.6754 .6749	.6875 .6880	.65740 .65755	.65740 .65725	.6875 .6880	.6875 .6880
1¹⁄₁₆–28 or .6875–28	UN	2A	.6793 .6788	.6864 .6869	.66320 .66305	.6749 .6744	.6862 .6867	.65940 .65955	.65940 .65925	.6864 .6869	.6862 .6865
		3A	.6804 .6799	.6875 .6880	.66430 .66415	.6770 .6765	.6875 .6880	.66150 .66165	.66150 .66135	.6875 .6880	.6877 .6880
1¹⁄₁₆–32 or .6875–32	UN	2A	.6799 .6794	.6864 .6869	.66610 .66595	.6760 .6755	.6859 .6864	.66250 .66265	.66250 .66235	.6864 .6869	.6859 .6864
		3A	.6810 .6805	.6875 .6880	.66720 .66705	.6780 .6775	.6875 .6880	.66450 .66465	.66450 .66435	.6875 .6880	.6875 .6880
¾–10 or .750–10	UNC	1A	.7336 .7330	.7482 .7488	.6832 .6830	.7177 .7171	.7482 .7488	.6744 .6746	.6744 .6742	.7482 .7488	.7482 .7488
		2A	.7336 .7330	.7482 .7488	.6832 .6830	.7206 .7200	.7482 .7488	.6773 .6775	.6773 .6771	.7482 .7488	.7482 .7488
		3A	.7354 .7348	.7500 .7506	.6850 .6848	.7239 .7233	.7500 .7506	.6806 .6808	.6806 .6804	.7500 .7506	.7500 .7506
¾–12 or .750–12	UN	2A	.7354 .7348	.7483 .7489	.6942 .6940	.7248 .7242	.7483 .7489	.6887 .6889	.6887 .6885	.7483 .7489	.7483 .7489
		3A	.7371 .7365	.7500 .7506	.6959 .6957	.7279 .7273	.7500 .7506	.6918 .6920	.6918 .6916	.7500 .7506	.7500 .7506
¾–16 or .750–16	UNF	1A	.7380 .7374	.7485 .7491	.7079 .7077	.7275 .7269	.7473 .7479	.7004 .7006	.7004 .7002	.7485 .7491	.7473 .7479
		2A	.7380 .7374	.7485 .7491	.7079 .7077	.7300 .7294	.7485 .7491	.7029 .7031	.7029 .7027	.7485 .7491	.7485 .7491
		3A	.7395 .7389	.7500 .7506	.7094 .7092	.7327 .7321	.7500 .7506	.7056 .7058	.7056 .7054	.7500 .7506	.7500 .7506

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
Nominal size and threads per inch	Series designation	Class	Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
¾–20 or .750–20	UNEF	2A	.7397 .7392	.7487 .7492	.71620 .71605	.7335 .7330	.7487 .7492	.71180 .71195	.71180 .71165	.7487 .7492	.7487 .7492
		3A	.7410 .7405	.7500 .7505	.71750 .71735	.7359 .7354	.7500 .7505	.71420 .71435	.71420 .71405	.7500 .7505	.7500 .7505
¾–28 or .750–28	UN	2A	.7417 .7412	.7488 .7493	.72560 .72545	.7373 .7368	.7486 .7491	.72180 .72195	.72180 .72165	.7488 .7493	.7486 .7491
		3A	.7429 .7424	.7500 .7505	.72680 .72665	.7394 .7389	.7500 .7505	.72390 .72405	.72390 .72375	.7500 .7505	.7500 .7505
¾–32 or .750–32	UN	2A	.7424 .7419	.7489 .7494	.72860 .72845	.7385 .7380	.7484 .7489	.72500 .72515	.72500 .72485	.7489 .7494	.7484 .7489
		3A	.7435 .7430	.7500 .7505	.72970 .72955	.7405 .7400	.7500 .7505	.72700 .72715	.72700 .72685	.7500 .7505	.7500 .7505
13⁄16–12 or .8125–12	UN	2A	.7979 .7973	.8108 .8114	.7567 .7565	.7873 .7867	.8108 .8114	.7512 .7514	.7512 .7510	.8108 .8114	.8108 .8114
		3A	.7996 .7990	.8125 .8131	.7584 .7582	.7904 .7898	.8125 .8131	.7543 .7545	.7543 .7541	.8125 .8131	.8125 .8131
13⁄16–16 or .8125–16	UN	2A	.8005 .7999	.8110 .8116	.7704 .7702	.7926 .7920	.8110 .8116	.7655 .7657	.7655 .7653	.8110 .8116	.8110 .8116
		3A	.8020 .8014	.8125 .8131	.7719 .7717	.7954 .7948	.8125 .8131	.7683 .7685	.7683 .7681	.8125 .8131	.8125 .8131
13⁄16–20 or .8125–20	UNEF	2A	.8022 .8017	.8112 .8117	.77870 .77855	.7960 .7955	.8112 .8117	.77430 .77445	.77430 .77415	.8112 .8117	.8112 .8117
		3A	.8035 .8030	.8125 .8130	.78000 .77985	.7984 .7979	.8125 .8130	.77670 .77685	.77670 .77655	.8125 .8130	.8125 .8130
13⁄16–28 or .8125–28	UN	2A	.8042 .8037	.8113 .8118	.78810 .78795	.7998 .7993	.8111 .8116	.78430 .78445	.78430 .78415	.8113 .8118	.8111 .8116
		3A	.8054 .8049	.8125 .8130	.78930 .78915	.8019 .8014	.8125 .8130	.78640 .78655	.78640 .78625	.8125 .8130	.8125 .8130
13⁄16–32 or .8125–32	UN	2A	.8049 .8044	.8114 .8119	.79110 .79095	.8010 .8005	.8109 .8114	.78750 .78765	.78750 .78735	.8114 .8119	.8109 .8114
		3A	.8060 .8055	.8125 .8130	.79220 .79205	.8030 .8025	.8125 .8130	.78950 .78965	.78950 .78935	.8125 .8130	.8125 .8130
⅞–9 or .875–9	UNC	1A	.8573 .8566	.8731 .8738	.8009 .8007	.8395 .8388	.8731 .8738	.7914 .7916	.7914 .7912	.8731 .8738	.8731 .8738
		2A	.8573 .8566	.8731 .8738	.8009 .8007	.8427 .8420	.8731 .8738	.7946 .7948	.7946 .7944	.8731 .8738	.8731 .8738
		3A	.8592 .8585	.8750 .8757	.8028 .8026	.8462 .8455	.8750 .8757	.7981 .7983	.7981 .7979	.8750 .8757	.8750 .8757
⅞–12 or .875–12	UN	2A	.8604 .8598	.8733 .8739	.8192 .8190	.8498 .8492	.8733 .8739	.8137 .8139	.8137 .8135	.8733 .8739	.8733 .8739
		3A	.8621 .8615	.8750 .8756	.8209 .8207	.8529 .8523	.8750 .8756	.8168 .8170	.8168 .8166	.8750 .8756	.8750 .8756
⅞–14 or .875–14	UNF	1A	.8619 .8613	.8734 .8740	.8270 .8268	.8498 .8492	.8725 .8731	.8189 .8191	.8189 .8187	.8734 .8740	.8725 .8731
		2A	.8619 .8613	.8734 .8740	.8270 .8268	.8525 .8519	.8734 .8740	.8216 .8218	.8216 .8214	.8734 .8740	.8734 .8740
		3A	.8635 .8629	.8750 .8756	.8286 .8284	.8554 .8548	.8750 .8756	.8245 .8247	.8245 .8243	.8750 .8756	.8750 .8756
⅞–16 or .875–16	UN	2A	.8630 .8624	.8735 .8741	.8329 .8327	.8551 .8545	.8735 .8741	.8280 .8282	.8280 .8278	.8735 .8741	.8735 .8741
		3A	.8645 .8639	.8750 .8756	.8344 .8342	.8579 .8573	.8750 .8756	.8308 .8310	.8308 .8306	.8750 .8756	.8750 .8756
⅞–20 or .875–20	UNEF	2A	.8647 .8642	.8737 .8742	.84120 .84105	.8585 .8580	.8737 .8742	.83680 .83695	.83680 .83665	.8737 .8742	.8737 .8742
		3A	.8660 .8655	.8750 .8755	.84250 .84235	.8609 .8604	.8750 .8755	.83920 .83935	.83920 .83905	.8750 .8755	.8750 .8755
⅞–28 or .875–28	UN	2A	.8667 .8662	.8738 .8743	.85060 .85045	.8623 .8618	.8736 .8741	.84680 .84695	.84680 .84665	.8738 .8743	.8736 .8741
		3A	.8679 .8674	.8750 .8755	.85180 .85165	.8644 .8639	.8750 .8755	.84890 .84905	.84890 .84875	.8750 .8755	.8750 .8755
⅞–32 or .875–32	UN	2A	.8674 .8669	.8739 .8744	.85360 .85345	.8635 .8630	.8734 .8739	.85000 .85015	.85000 .84985	.8739 .8744	.8734 .8739
		3A	.8685 .8680	.8750 .8755	.85470 .85455	.8655 .8650	.8750 .8755	.85200 .85215	.85200 .85185	.8750 .8755	.8750 .8755

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
15/16–12 or .9375–12	UN	2A	.9229 .9223	.9358 .9364	.8817 .8815	.9121 .9115	.9358 .9364	.8760 .8762	.8760 .8758	.9358 .9364	.9358 .9364
		3A	.9246 .9240	.9375 .9381	.8834 .8832	.9153 .9147	.9375 .9381	.8792 .8794	.8792 .8790	.9375 .9381	.9375 .9381
15/16–16 or .9375–16	UN	2A	.9255 .9249	.9360 .9366	.8954 .8952	.9175 .9169	.9360 .9366	.8904 .8906	.8904 .8902	.9360 .9366	.9360 .9366
		3A	.9270 .9264	.9375 .9381	.8969 .8967	.9203 .9197	.9375 .9381	.8932 .8934	.8932 .8930	.9375 .9381	.9375 .9381
15/16–20 or .9375–20	UNEF	2A	.9271 .9266	.9361 .9366	.90360 .90345	.9208 .9203	.9361 .9366	.89910 .89925	.89910 .89895	.9361 .9366	.9361 .9366
		3A	.9285 .9280	.9375 .9380	.90500 .90485	.9233 .9228	.9375 .9380	.90160 .90175	.90160 .90145	.9375 .9380	.9375 .9380
15/16–28 or .9375–28	UN	2A	.9292 .9287	.9363 .9368	.91310 .91295	.9246 .9241	.9359 .9364	.90910 .90925	.90910 .90895	.9363 .9368	.9359 .9364
		3A	.9304 .9299	.9375 .9380	.91430 .91415	.9268 .9263	.9375 .9380	.91130 .91145	.91130 .91115	.9375 .9380	.9375 .9380
15/16–32 or .9375–32	UN	2A	.9299 .9294	.9364 .9369	.91610 .91595	.9258 .9253	.9357 .9362	.91230 .91245	.91230 .91215	.9364 .9369	.9357 .9362
		3A	.9310 .9305	.9375 .9380	.91720 .91705	.9279 .9274	.9375 .9380	.91440 .91455	.91440 .91425	.9375 .9380	.9375 .9380
1–8 or 1.000–8	UNC	1A	.9809 .9802	.9980 .9987	.9168 .9166	.9608 .9601	.9980 .9987	.9067 .9069	.9067 .9065	.9980 .9987	.9980 .9987
		2A	.9809 .9802	.9980 .9987	.9168 .9166	.9641 .9634	.9980 .9987	.9100 .9102	.9100 .9098	.9980 .9987	.9980 .9987
		3A	.9829 .9822	1.0000 1.0007	.9188 .9186	.9678 .9671	1.0000 1.0007	.9137 .9139	.9137 .9135	1.0000 1.0007	1.0000 1.0007
1–12 or 1.000–12	UNF	1A	.9853 .9847	.9982 .9988	.9441 .9439	.9714 .9708	.9978 .9984	.9353 .9355	.9353 .9351	.9982 .9988	.9978 .9984
		2A	.9853 .9847	.9982 .9988	.9441 .9439	.9743 .9737	.9982 .9988	.9382 .9384	.9382 .9380	.9982 .9988	.9982 .9988
		3A	.9871 .9865	1.0000 1.0006	.9459 .9457	.9776 .9770	1.0000 1.0006	.9415 .9417	.9415 .9413	1.0000 1.0006	1.0000 1.0006
1–16 or 1.000–16	UN	2A	.9880 .9874	.9985 .9991	.9579 .9577	.9800 .9794	.9985 .9991	.9529 .9531	.9529 .9527	.9985 .9991	.9985 .9991
		3A	.9895 .9889	1.0000 1.0006	.9594 .9592	.9828 .9822	1.0000 1.0006	.9557 .9559	.9557 .9555	1.0000 1.0006	1.0000 1.0006
1–20 or 1.000–20	UNEF	2A	.9896 .9891	.9986 .9991	.96610 .96595	.9833 .9828	.9986 .9991	.96160 .96175	.96160 .96145	.9986 .9991	.9986 .9991
		3A	.9910 .9905	1.0000 1.0005	.96750 .96735	.9858 .9853	1.0000 1.0005	.96410 .96425	.96410 .96395	1.0000 1.0005	1.0000 1.0005
1–28 or 1.000–28	UN	2A	.9917 .9912	.9988 .9993	.97560 .97545	.9871 .9866	.9984 .9989	.97160 .97175	.97160 .97145	.9988 .9993	.9984 .9989
		3A	.9929 .9924	1.0000 1.0005	.97680 .97665	.9893 .9888	1.0000 1.0005	.97380 .97395	.97380 .97365	1.0000 1.0005	1.0000 1.0005
1–32 or 1.000–32	UN	2A	.9924 .9919	.9989 .9994	.97860 .97845	.9883 .9878	.9982 .9987	.97480 .97495	.97480 .97465	.9989 .9994	.9982 .9987
		3A	.9935 .9930	1.0000 1.0005	.97970 .97955	.9904 .9899	1.0000 1.0005	.97690 .97705	.97690 .97675	1.0000 1.0005	1.0000 1.0005
1 1/16–8 or 1.0625–8	UN	2A	1.0434 1.0427	1.0605 1.0612	.9793 .9791	1.0266 1.0259	1.0605 1.0612	.9725 .9727	.9725 .9723	1.0605 1.0612	1.0605 1.0612
		3A	1.0454 1.0447	1.0625 1.0632	.9813 .9811	1.0303 1.0296	1.0625 1.0632	.9762 .9764	.9762 .9760	1.0625 1.0632	1.0625 1.0632
1 1/16–12 or 1.0625–12	UN	2A	1.0479 1.0473	1.0608 1.0614	1.0067 1.0065	1.0371 1.0365	1.0608 1.0614	1.0010 1.0012	1.0010 1.0008	1.0608 1.0614	1.0608 1.0614
		3A	1.0496 1.0490	1.0625 1.0631	1.0084 1.0082	1.0403 1.0397	1.0625 1.0631	1.0042 1.0044	1.0042 1.0040	1.0625 1.0631	1.0625 1.0631
1 1/16–16 or 1.0625–16	UN	2A	1.0505 1.0499	1.0610 1.0616	1.0204 1.0202	1.0425 1.0419	1.0610 1.0616	1.0154 1.0156	1.0154 1.0152	1.0610 1.0616	1.0610 1.0616
		3A	1.0520 1.0514	1.0625 1.0631	1.0219 1.0217	1.0453 1.0447	1.0625 1.0631	1.0182 1.0184	1.0182 1.0180	1.0625 1.0631	1.0625 1.0631
1 1/16–18 or 1.0625–18	UNEF	2A	1.0514 1.0509	1.0611 1.0616	1.02500 1.02485	1.0444 1.0439	1.0611 1.0616	1.02030 1.02045	1.02030 1.02015	1.0611 1.0616	1.0611 1.0616
		3A	1.0528 1.0523	1.0625 1.0630	1.02640 1.02625	1.0469 1.0464	1.0625 1.0630	1.02280 1.02295	1.02280 1.02265	1.0625 1.0630	1.0625 1.0630

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
Nominal size and threads per inch	Series designation	Class	Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1 1/16–20 or 1.0625–20	UN	2A	1.0521 1.0516	1.0611 1.0616	1.02860 1.02845	1.0458 1.0453	1.0611 1.0616	1.02410 1.02425	1.02410 1.02395	1.0611 1.0616	1.0611 1.0616
		3A	1.0535 1.0530	1.0625 1.0630	1.03000 1.02985	1.0483 1.0478	1.0625 1.0630	1.02660 1.02675	1.02660 1.02645	1.0625 1.0630	1.0625 1.0630
1 1/16–28 or 1.0625–28	UN	2A	1.0542 1.0537	1.0613 1.0618	1.03810 1.03795	1.0496 1.0491	1.0609 1.0614	1.03410 1.03425	1.03410 1.03395	1.0613 1.0618	1.0609 1.0614
		3A	1.0554 1.0549	1.0625 1.0630	1.03930 1.03915	1.0518 1.0513	1.0625 1.0630	1.03630 1.03645	1.03630 1.03615	1.0625 1.0630	1.0625 1.0630
1 1/8–7 or 1.125–7	UNC	1A	1.1040 1.1033	1.1228 1.1235	1.0300 1.0298	1.0810 1.0803	1.1228 1.1235	1.0191 1.0193	1.0191 1.0189	1.1228 1.1235	1.1228 1.1235
		2A	1.1040 1.1033	1.1228 1.1235	1.0300 1.0298	1.0847 1.0846	1.1228 1.1235	1.0228 1.0230	1.0228 1.0226	1.1228 1.1235	1.1228 1.1235
		3A	1.1062 1.1055	1.1250 1.1257	1.0322 1.0320	1.0887 1.0880	1.1250 1.1257	1.0268 1.0270	1.0268 1.0266	1.1250 1.1257	1.1250 1.1257
1 1/8–8 or 1.125–8	UN	2A	1.1058 1.1051	1.1229 1.1236	1.0417 1.0415	1.0889 1.0882	1.1229 1.1236	1.0348 1.0350	1.0348 1.0346	1.1229 1.1236	1.1229 1.1236
		3A	1.1079 1.1072	1.1250 1.1257	1.0438 1.0436	1.0927 1.0920	1.1250 1.1257	1.0386 1.0388	1.0386 1.0384	1.1250 1.1257	1.1250 1.1257
1 1/8–12 or 1.125–12	UNF	1A	1.1103 1.1097	1.1232 1.1238	1.0691 1.0689	1.0962 1.0956	1.1226 1.1232	1.0601 1.0603	1.0601 1.0599	1.1232 1.1238	1.1226 1.1232
		2A	1.1103 1.1097	1.1232 1.1238	1.0691 1.0689	1.0992 1.0986	1.1232 1.1238	1.0631 1.0633	1.0631 1.0629	1.1232 1.1238	1.1232 1.1238
		3A	1.1121 1.1115	1.1250 1.1256	1.0709 1.0707	1.1025 1.1019	1.1250 1.1256	1.0664 1.0666	1.0664 1.0662	1.1250 1.1256	1.1250 1.1256
1 1/8–16 or 1.125–16	UN	2A	1.1130 1.1124	1.1235 1.1241	1.0829 1.0827	1.1050 1.1044	1.1235 1.1241	1.0779 1.0781	1.0779 1.0777	1.1235 1.1241	1.1235 1.1241
		3A	1.1145 1.1139	1.1250 1.1256	1.0844 1.0842	1.1078 1.1072	1.1250 1.1256	1.0807 1.0809	1.0807 1.0805	1.1250 1.1256	1.1250 1.1256
1 1/8–18 or 1.125–18	UNEF	2A	1.1139 1.1134	1.1236 1.1241	1.08750 1.08735	1.1069 1.1064	1.1236 1.1241	1.08280 1.08295	1.08280 1.08265	1.1236 1.1241	1.1236 1.1241
		3A	1.1153 1.1148	1.1250 1.1255	1.08890 1.08875	1.1094 1.1089	1.1250 1.1255	1.08530 1.08530	1.08530 1.08515	1.1250 1.1255	1.1250 1.1255
1 1/8–20 or 1.125–20	UN	2A	1.1146 1.1141	1.1236 1.1241	1.09110 1.09095	1.1083 1.1078	1.1236 1.1241	1.08660 1.08675	1.08660 1.08645	1.1236 1.1241	1.1236 1.1241
		3A	1.1160 1.1155	1.1250 1.1255	1.09250 1.09235	1.1108 1.1103	1.1250 1.1255	1.08910 1.08925	1.08910 1.08895	1.1250 1.1255	1.1250 1.1255
1 1/8–28 or 1.125–28	UN	2A	1.1167 1.1162	1.1238 1.1243	1.10060 1.10045	1.1121 1.1116	1.1234 1.1239	1.09660 1.09675	1.09660 1.09645	1.1238 1.1243	1.1234 1.1239
		3A	1.1179 1.1174	1.1250 1.1255	1.10180 1.10165	1.1143 1.1138	1.1250 1.1255	1.09880 1.09895	1.09880 1.09865	1.1250 1.1255	1.1250 1.1255
1 3/16–8 or 1.1875–8	UN	2A	1.1683 1.1676	1.1854 1.1861	1.1042 1.1040	1.1513 1.1506	1.1854 1.1861	1.0972 1.0974	1.0972 1.0970	1.1854 1.1861	1.1854 1.1861
		3A	1.1704 1.1697	1.1875 1.1882	1.1063 1.1061	1.1552 1.1545	1.1875 1.1882	1.1011 1.1013	1.1011 1.1009	1.1875 1.1882	1.1875 1.1882
1 3/16–12 or 1.1875–12	UN	2A	1.1729 1.1723	1.1858 1.1864	1.1317 1.1315	1.1620 1.1614	1.1858 1.1864	1.1259 1.1261	1.1259 1.1257	1.1858 1.1864	1.1858 1.1864
		3A	1.1746 1.1740	1.1875 1.1881	1.1334 1.1332	1.1652 1.1646	1.1875 1.1881	1.1291 1.1293	1.1291 1.1289	1.1875 1.1881	1.1875 1.1881
1 3/16–16 or 1.1875–16	UN	2A	1.1755 1.1749	1.1860 1.1866	1.1454 1.1452	1.1674 1.1668	1.1860 1.1866	1.1403 1.1405	1.1403 1.1401	1.1860 1.1866	1.1860 1.1866
		3A	1.1770 1.1764	1.1875 1.1881	1.1469 1.1467	1.1702 1.1696	1.1875 1.1881	1.1431 1.1433	1.1431 1.1429	1.1875 1.1881	1.1875 1.1881
1 3/16–18 or 1.1875–18	UNEF	2A	1.1763 1.1758	1.1860 1.1865	1.14990 1.14975	1.1691 1.1686	1.1860 1.1865	1.14500 1.14515	1.14500 1.14485	1.1860 1.1865	1.1860 1.1865
		3A	1.1778 1.1773	1.1875 1.1880	1.15140 1.15125	1.1719 1.1714	1.1875 1.1880	1.14780 1.14795	1.14780 1.14765	1.1875 1.1880	1.1875 1.1880
1 3/16–20 or 1.1875–20	UN	2A	1.1771 1.1766	1.1861 1.1866	1.15360 1.15345	1.1706 1.1701	1.1861 1.1866	1.14890 1.14905	1.14890 1.14875	1.1861 1.1866	1.1861 1.1866
		3A	1.1785 1.1780	1.1875 1.1880	1.15500 1.15485	1.1732 1.1727	1.1875 1.1880	1.15150 1.15165	1.15150 1.15135	1.1875 1.1880	1.1875 1.1880
1 3/16–28 or 1.1875–28	UN	2A	1.1792 1.1787	1.1863 1.1868	1.16310 1.16295	1.1745 1.1740	1.1858 1.1863	1.15900 1.15915	1.15900 1.15885	1.1863 1.1868	1.1858 1.1863
		3A	1.1804 1.1799	1.1875 1.1880	1.16430 1.16415	1.1767 1.1762	1.1875 1.1880	1.16120 1.16135	1.16120 1.16105	1.1875 1.1880	1.1875 1.1880

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
Nominal size and threads per inch	Series designation	Class	Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1¼–7 or 1.250–7	UNC	1A	1.2290 1.2283	1.2478 1.2485	1.1550 1.1548	1.2058 1.2051	1.2478 1.2485	1.1439 1.1441	1.1439 1.1437	1.2478 1.2485	1.2478 1.2485
		2A	1.2290 1.2283	1.2478 1.2485	1.1550 1.1548	1.2095 1.2088	1.2478 1.2485	1.1476 1.1478	1.1476 1.1474	1.2478 1.2485	1.2478 1.2485
		3A	1.2312 1.2305	1.2500 1.2507	1.1572 1.1570	1.2136 1.2129	1.2500 1.2507	1.1517 1.1519	1.1517 1.1515	1.2500 1.2507	1.2500 1.2507
1¼–8 or 1.250–8	UN	2A	1.2308 1.2301	1.2479 1.2486	1.1667 1.1665	1.2138 1.2131	1.2479 1.2486	1.1597 1.1599	1.1597 1.1595	1.2479 1.2486	1.2479 1.2486
		3A	1.2329 1.2322	1.2500 1.2507	1.1688 1.1686	1.2176 1.2169	1.2500 1.2507	1.1635 1.1637	1.1635 1.1633	1.2500 1.2507	1.2500 1.2507
1¼–12 or 1.250–12	UNF	1A	1.2353 1.2347	1.2482 1.2488	1.1941 1.1939	1.2210 1.2204	1.2474 1.2480	1.1849 1.1851	1.1849 1.1847	1.2482 1.2488	1.2474 1.2480
		2A	1.2353 1.2347	1.2482 1.2488	1.1941 1.1939	1.2240 1.2234	1.2482 1.2488	1.1879 1.1881	1.1879 1.1877	1.2482 1.2488	1.2482 1.2488
		3A	1.2371 1.2365	1.2500 1.2506	1.1959 1.1957	1.2274 1.2268	1.2500 1.2506	1.1913 1.1915	1.1913 1.1911	1.2500 1.2506	1.2500 1.2506
1¼–16 or 1.250–16	UN	2A	1.2380 1.2374	1.2485 1.2491	1.2079 1.2077	1.2299 1.2293	1.2485 1.2491	1.2028 1.2030	1.2028 1.2026	1.2485 1.2491	1.248_ 1.2491
		3A	1.2395 1.2389	1.2500 1.2506	1.2094 1.2092	1.2327 1.2321	1.2500 1.2506	1.2056 1.2058	1.2056 1.2054	1.2500 1.2506	1.2500 1.2506
1¼–18 or 1.250–18	UNEF	2A	1.2388 1.2383	1.2485 1.2490	1.21240 1.21225	1.2316 1.2311	1.2485 1.2490	1.20750 1.20765	1.20750 1.20735	1.2485 1.2490	1.2485 1.2490
		3A	1.2403 1.2398	1.2500 1.2505	1.21390 1.21375	1.2344 1.2339	1.2500 1.2505	1.21030 1.21045	1.21030 1.21015	1.2500 1.2505	1.2500 1.2505
1¼–20 or 1.250–20	UN	2A	1.2396 1.2391	1.2486 1.2491	1.21610 1.21595	1.2331 1.2326	1.2486 1.2491	1.21140 1.21155	1.21140 1.21125	1.2486 1.2491	1.2486 1.2491
		3A	1.2410 1.2405	1.2500 1.2505	1.21750 1.21735	1.2357 1.2352	1.2500 1.2505	1.21400 1.21415	1.21400 1.21385	1.2500 1.2505	1.2500 1.2505
1¼–28 or 1.250–28	UN	2A	1.2417 1.2412	1.2488 1.2493	1.22560 1.22545	1.2370 1.2365	1.2483 1.2488	1.22150 1.22165	1.22150 1.22135	1.2488 1.2493	1.2483 1.2488
		3A	1.2429 1.2424	1.2500 1.2505	1.22680 1.22665	1.2392 1.2387	1.2500 1.2505	1.22370 1.22385	1.22370 1.22355	1.2500 1.2505	1.2500 1.2505
1⁵⁄₁₆–8 or 1.3125–8	UN	2A	1.2933 1.2926	1.3104 1.3111	1.2292 1.2290	1.2762 1.2755	1.3104 1.3111	1.2221 1.2223	1.2221 1.2219	1.3104 1.3111	1.3104 1.3111
		3A	1.2954 1.2947	1.3125 1.3132	1.2313 1.2311	1.2801 1.2794	1.3125 1.3132	1.2260 1.2262	1.2260 1.2258	1.3125 1.3132	1.3125 1.3132
1⁵⁄₁₆–12 or 1.3125–12	UN	2A	1.2979 1.2973	1.3108 1.3114	1.2567 1.2565	1.2870 1.2864	1.3108 1.3114	1.2509 1.2511	1.2509 1.2507	1.3108 1.3114	1.3108 1.3114
		3A	1.2996 1.2990	1.3125 1.3131	1.2584 1.2582	1.2902 1.2896	1.3125 1.3131	1.2541 1.2543	1.2541 1.2539	1.3125 1.3131	1 3131
1⁵⁄₁₆–16 or 1.3125–16	UN	2A	1.3005 1.2999	1.3110 1.3116	1.2704 1.2702	1.2924 1.2918	1.3110 1.3116	1.2653 1.2655	1.2653 1.2651	1.3110 1.3116	1.3110 1.3116
		3A	1.3020 1.3014	1.3125 1.3131	1.2719 1.2717	1.2952 1.2946	1.3125 1.3131	1.2681 1.2683	1.2681 1.2679	1.3125 1.3131	1.3125 1.3131
1⁵⁄₁₆–18 or 1.3125–18	UNEF	2A	1.3013 1.3008	1.3110 1.3115	1.27490 1.27475	1.2941 1.2936	1.3110 1.3115	1.27000 1.27015	1.27000 1.26985	1.3110 1.3115	1.3110 1.3115
		3A	1.3028 1.3023	1.3125 1.3130	1.27640 1.27625	1.2969 1.2964	1.3125 1.3130	1.27280 1.27295	1.27280 1.27265	1.3125 1.3130	1.3125 1.3130
1⁵⁄₁₆–20 or 1.3125–20	UN	2A	1.3021 1.3016	1.3111 1.3116	1.27860 1.27845	1.2956 1.2951	1.3111 1.3116	1.27390 1.27405	1.27390 1.27375	1.3111 1.3116	1.3111 1.3116
		3A	1.3035 1.3030	1.3125 1.3130	1.28000 1.27985	1.2982 1.2977	1.3125 1.3130	1.27650 1.27665	1.27650 1.27635	1.3125 1.3130	1.3125 1.3130
1⁵⁄₁₆–28 or 1.3125–28	UN	2A	1.3042 1.3037	1.3113 1.3118	1.28810 1.28795	1.2995 1.2990	1.3108 1.3113	1.28400 1.28415	1.28400 1.28385	1.3113 1.3118	1.3108 1.3113
		3A	1.3054 1.3049	1.3125 1.3130	1.28930 1.28915	1.3017 1.3012	1.3125 1.3130	1.28620 1.28635	1.28620 1.28605	1.3125 1.3130	1.3125 1.3130
1⅜–6 or 1.375–6	UNC	1A	1.3516 1.3508	1.3726 1.3734	1.2643 1.2641	1.3245 1.3237	1.3726 1.3734	1.2523 1.2525	1.2523 1.2521	1.3726 1.3734	1.3726 1.3734
		2A	1.3516 1.3508	1.3726 1.3734	1.2643 1.2641	1.3285 1.3277	1.3726 1.3734	1.2563 1.2565	1.2563 1.2561	1.3726 1.3734	1.3726 1.3734
		3A	1.3540 1.3532	1.3750 1.3758	1.2667 1.2665	1.3329 1.3321	1.3750 1.3758	1.2607 1.2609	1.2607 1.2605	1.3750 1.3758	1.3750 1.3758
1⅜–8 or 1.375–8	UN	2A	1.3557 1.3550	1.3728 1.3735	1.2916 1.2914	1.3385 1.3378	1.3728 1.3735	1.2844 1.2846	1.2844 1.2842	1.3728 1.3735	1.3728 1.3735
		3A	1.3579 1.3572	1.3750 1.3757	1.2938 1.2936	1.3425 1.3418	1.3750 1.3757	1.2884 1.2886	1.2884 1.2882	1.3750 1.3757	1.3750 1.3757

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
1⅜–12 or 1.375–12	UNF	1A	1.3602 1.3596	1.3731 1.3737	1.3190 1.3188	1.3457 1.3451	1.3721 1.3727	1.3096 1.3098	1.3096 1.3094	1.3731 1.3737	1.3721 1.3727
		2A	1.3602 1.3596	1.3731 1.3737	1.3190 1.3188	1.3488 1.3482	1.3731 1.3737	1.3127 1.3129	1.3127 1.3125	1.3731 1.3737	1.3731 1.3737
		3A	1.3621 1.3615	1.3750 1.3756	1.3209 1.3207	1.3523 1.3517	1.3750 1.3756	1.3162 1.3164	1.3162 1.3160	1.3750 1.3756	1.3750 1.3756
1⅜–16 or 1.375–16	UN	2A	1.3630 1.3624	1.3735 1.3741	1.3329 1.3327	1.3549 1.3543	1.3735 1.3741	1.3278 1.3280	1.3278 1.3276	1.3735 1.3741	1.3735 1.3741
		3A	1.3645 1.3639	1.3750 1.3756	1.3344 1.3342	1.3577 1.3571	1.3750 1.3756	1.3306 1.3308	1.3306 1.3304	1.3750 1.3756	1.3750 1.3756
1⅜–18 or 1.375–18	UNEF	2A	1.3638 1.3633	1.3735 1.3740	1.33740 1.33725	1.3566 1.3561	1.3735 1.3740	1.33250 1.33265	1.33250 1.33235	1.3735 1.3740	1.3735 1.3740
		3A	1.3653 1.3648	1.3750 1.3755	1.33890 1.33875	1.3594 1.3589	1.3750 1.3755	1.33530 1.33545	1.33530 1.33515	1.3750 1.3755	1.3750 1.3755
1⅜–20 or 1.375–20	UN	2A	1.3646 1.3641	1.3736 1.3741	1.34110 1.34095	1.3581 1.3576	1.3736 1.3741	1.33640 1.33655	1.33640 1.33625	1.3736 1.3741	1.3736 1.3741
		3A	1.3660 1.3655	1.3750 1.3755	1.34250 1.34235	1.3607 1.3602	1.3750 1.3755	1.33900 1.33915	1.33900 1.33885	1.3750 1.3755	1.3750 1.3755
1⅜–28 or 1.375–28	UN	2A	1.3667 1.3662	1.3738 1.3743	1.35060 1.35045	1.3620 1.3615	1.3733 1.3738	1.34650 1.34665	1.34650 1.34635	1.3738 1.3743	1.3733 1.3738
		3A	1.3679 1.3674	1.3750 1.3755	1.35180 1.35165	1.3642 1.3637	1.3750 1.3755	1.34870 1.34885	1.34870 1.34855	1.3750 1.3755	1.3750 1.3755
1⁷⁄₁₆–6 or 1.4375–6	UN	2A	1.4141 1.4133	1.4351 1.4359	1.3268 1.3266	1.3910 1.3902	1.4351 1.4359	1.3188 1.3190	1.3188 1.3186	1.4351 1.4359	1.4351 1.4359
		3A	1.4165 1.4157	1.4375 1.4383	1.3292 1.3290	1.3954 1.3946	1.4375 1.4383	1.3232 1.3234	1.3232 1.3230	1.4375 1.4383	1.4375 1.4383
1⁷⁄₁₆–8 or 1.4375–8	UN	2A	1.4182 1.4175	1.4353 1.4360	1.3541 1.3539	1.4010 1.4003	1.4353 1.4360	1.3469 1.3471	1.3469 1.3467	1.4353 1.4360	1.4353 1.4360
		3A	1.4204 1.4197	1.4375 1.4382	1.3563 1.3561	1.4050 1.4043	1.4375 1.4382	1.3509 1.3511	1.3509 1.3507	1.4375 1.4382	1.4375 1.4382
1⁷⁄₁₆–12 or 1.4375–12	UN	2A	1.4228 1.4222	1.4357 1.4363	1.3816 1.3814	1.4118 1.4112	1.4357 1.4363	1.3757 1.3759	1.3757 1.3755	1.4357 1.4363	1.4357 1.4363
		3A	1.4246 1.4240	1.4375 1.4381	1.3834 1.3832	1.4151 1.4145	1.4375 1.4381	1.3790 1.3792	1.3790 1.3788	1.4375 1.4381	1.4375 1.4381
1⁷⁄₁₆–16 or 1.4375–16	UN	2A	1.4254 1.4248	1.4359 1.4365	1.3953 1.3951	1.4172 1.4166	1.4359 1.4365	1.3901 1.3903	1.3901 1.3899	1.4359 1.4365	1.4359 1.4365
		3A	1.4270 1.4264	1.4375 1.4381	1.3969 1.3967	1.4201 1.4195	1.4375 1.4381	1.3930 1.3932	1.3930 1.3928	1.4375 1.4381	1.4375 1.4381
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2A	1.4263 1.4258	1.4360 1.4365	1.39990 1.39975	1.4190 1.4185	1.4360 1.4365	1.39490 1.39505	1.39490 1.39475	1.4360 1.4365	1.4360 1.4365
		3A	1.4278 1.4273	1.4375 1.4380	1.40140 1.40125	1.4218 1.4213	1.4375 1.4380	1.39770 1.39785	1.39770 1.39755	1.4375 1.4380	1.4375 1.4380
1⁷⁄₁₆–20 or 1.4375–20	UN	2A	1.4271 1.4266	1.4361 1.4366	1.40360 1.40345	1.4205 1.4200	1.4361 1.4366	1.39880 1.39895	1.39880 1.39865	1.4361 1.4366	1.4361 1.4366
		3A	1.4285 1.4280	1.4375 1.4380	1.40500 1.40485	1.4231 1.4226	1.4375 1.4380	1.40140 1.40155	1.40140 1.40125	1.4375 1.4380	1.4375 1.4380
1⁷⁄₁₆–28 or 1.4375–28	UN	2A	1.4291 1.4286	1.4362 1.4367	1.41300 1.41285	1.4243 1.4238	1.4356 1.4361	1.40880 1.40895	1.40880 1.40865	1.4362 1.4367	1.4356 1.4361
		3A	1.4304 1.4299	1.4375 1.4380	1.41430 1.41415	1.4267 1.4262	1.4375 1.4380	1.41120 1.41135	1.41120 1.41105	1.4375 1.4380	1.4375 1.4380
1½–6 or 1.500–6	UNC	1A	1.4766 1.4758	1.4976 1.4984	1.3893 1.3891	1.4494 1.4486	1.4976 1.4984	1.3772 1.3774	1.3772 1.3770	1.4976 1.4984	1.4976 1.4984
		2A	1.4766 1.4758	1.4976 1.4984	1.3893 1.3891	1.4534 1.4526	1.4976 1.4984	1.3812 1.3814	1.3812 1.3810	1.4976 1.4984	1.4976 1.4984
		3A	1.4790 1.4782	1.5000 1.5008	1.3917 1.3915	1.4578 1.4570	1.5000 1.5008	1.3856 1.3858	1.3856 1.3854	1.5000 1.5008	1.5000 1.5008
1½–8 or 1.500–8	UN	2A	1.4807 1.4800	1.4978 1.4985	1.4166 1.4164	1.4634 1.4627	1.4978 1.4985	1.4093 1.4095	1.4093 1.4091	1.4978 1.4985	1.4978 1.4985
		3A	1.4829 1.4822	1.5000 1.5007	1.4188 1.4186	1.4674 1.4667	1.5000 1.5007	1.4133 1.4135	1.4133 1.4131	1.5000 1.5007	1.5000 1.5007
1½–12 or 1.500–12	UNF	1A	1.4852 1.4846	1.4981 1.4987	1.4440 1.4438	1.4705 1.4699	1.4969 1.4975	1.4344 1.4346	1.4344 1.4342	1.4981 1.4987	1.4969 1.4975
		2A	1.4852 1.4846	1.4981 1.4987	1.4440 1.4438	1.4737 1.4731	1.4981 1.4987	1.4376 1.4378	1.4376 1.4374	1.4981 1.4987	1.4981 1.4987
		3A	1.4871 1.4865	1.5000 1.5006	1.4459 1.4457	1.4772 1.4766	1.5000 1.5006	1.4411 1.4413	1.4411 1.4409	1.5000 1.5006	1.5000 1.5006

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
Nominal size and threads per inch	Series designation	Class	Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
1½–16 or 1.500–16	UN	2A	1.4879	1.4984	1.4578	1.4797	1.4984	1.4526	1.4526	1.4984	1.4984
			1.4873	1.4990	1.4576	1.4791	1.4990	1.4528	1.4524	1.4990	1.4990
		3A	1.4895	1.5000	1.4594	1.4826	1.5000	1.4555	1.4555	1.5000	1.5000
			1.4889	1.5006	1.4592	1.4820	1.5006	1.4557	1.4553	1.5006	1.5006
1½–18 or 1.500–18	UNEF	2A	1.4888	1.4985	1.46240	1.4815	1.4984	1.45740	1.45740	1.4985	1.4985
			1.4883	1.4990	1.46225	1.4810	1.4990	1.45755	1.45725	1.4990	1.4990
		3A	1.4903	1.5000	1.46390	1.4843	1.5000	1.46020	1.46020	1.5000	1.5000
			1.4898	1.5005	1.46375	1.4838	1.5005	1.46035	1.46005	1.5005	1.5005
1½–20 or 1.500–20	UN	2A	1.4896	1.4986	1.46610	1.4830	1.4986	1.46130	1.46130	1.4986	1.4986
			1.4891	1.4991	1.46595	1.4825	1.4991	1.46145	1.46115	1.4991	1.4991
		3A	1.4910	1.5000	1.46750	1.4856	1.5000	1.46390	1.46390	1.5000	1.5000
			1.4905	1.5005	1.46735	1.4851	1.5005	1.46405	1.46375	1.5005	1.5005
1½–28 or 1.500–28	UN	2A	1.4916	1.4987	1.47550	1.4868	1.4981	1.47130	1.47130	1.4987	1.4981
			1.4911	1.4992	1.47535	1.4863	1.4986	1.47145	1.47115	1.4992	1.4986
		3A	1.4929	1.5000	1.47680	1.4892	1.5000	1.47370	1.47370	1.5000	1.5000
			1.4924	1.5005	1.47665	1.4887	1.5005	1.47385	1.47355	1.5005	1.5005
1 9/16–6 or 1.5625–6	UN	2A	1.5391	1.5601	1.45180	1.5158	1.5601	1.44360	1.44360	1.5601	1.5601
			1.5383	1.5609	1.45155	1.5150	1.5609	1.44385	1.44335	1.5609	1.5609
		3A	1.5415	1.5625	1.45420	1.5203	1.5625	1.44810	1.44810	1.5625	1.5625
			1.5407	1.5633	1.45395	1.5195	1.5633	1.44835	1.44785	1.5633	1.5633
1 9/16–8 or 1.5625–8	UN	2A	1.5432	1.5603	1.47910	1.5258	1.5603	1.47170	1.47170	1.5603	1.5603
			1.5425	1.5610	1.47885	1.5251	1.5610	1.47195	1.47145	1.5610	1.5610
		3A	1.5454	1.5625	1.48130	1.5299	1.5625	1.47580	1.47580	1.5625	1.5625
			1.5447	1.5632	1.48105	1.5292	1.5632	1.47605	1.47555	1.5632	1.5632
1 9/16–12 or 1.5625–12	UN	2A	1.5478	1.5607	1.50660	1.5368	1.5607	1.50070	1.50070	1.5607	1.5607
			1.5472	1.5613	1.50635	1.5362	1.5613	1.50095	1.50045	1.5613	1.5613
		3A	1.5496	1.5625	1.50840	1.5401	1.5625	1.50400	1.50400	1.5625	1.5625
			1.5490	1.5631	1.50815	1.5395	1.5631	1.50425	1.50375	1.5631	1.5631
1 9/16–16 or 1.5625–16	UN	2A	1.5504	1.5609	1.52030	1.5422	1.5609	1.51510	1.51510	1.5609	1.5609
			1.5498	1.5615	1.52005	1.5416	1.5615	1.51535	1.51485	1.5615	1.5619
		3A	1.5520	1.5625	1.52190	1.5451	1.5625	1.51800	1.51800	1.5625	1.5625
			1.5514	1.5631	1.52165	1.5445	1.5631	1.51825	1.51775	1.5631	1.5631
1 9/16–18 or 1.5625–18	UNEF	2A	1.5513	1.5610	1.5249	1.5440	1.5610	1.5199	1.5199	1.5610	1.5610
			1.5508	1.5615	1.5247	1.5435	1.5615	1.5201	1.5197	1.5615	1.5615
		3A	1.5528	1.5625	1.5264	1.5468	1.5625	1.5227	1.5227	1.5625	1.5625
			1.5523	1.5630	1.5262	1.5463	1.5630	1.5229	1.5225	1.5630	1.5630
1 9/16–20 or 1.5625–20	UN	2A	1.5521	1.5611	1.5286	1.5455	1.5611	1.5238	1.5238	1.5611	1.5611
			1.5516	1.5616	1.5284	1.5450	1.5616	1.5240	1.5236	1.5616	1.5616
		3A	1.5535	1.5625	1.5300	1.5481	1.5625	1.5264	1.5264	1.5625	1.5625
			1.5530	1.5630	1.5298	1.5476	1.5630	1.5266	1.5262	1.5630	1.5630
1 5/8–6 or 1.625–6	UN	2A	1.6015	1.6225	1.51420	1.5782	1.6225	1.50600	1.50600	1.6225	1.6225
			1.6007	1.6233	1.51395	1.5774	1.6233	1.50625	1.50575	1.6233	1.6233
		3A	1.6040	1.6250	1.51670	1.5827	1.6250	1.51050	1.51050	1.6250	1.6250
			1.6032	1.6258	1.51645	1.5819	1.6258	1.51075	1.51025	1.6258	1.6258
1 5/8–8 or 1.625–8	UN	2A	1.6057	1.6228	1.54160	1.5883	1.6228	1.53420	1.53420	1.6228	1.6228
			1.6050	1.6235	1.54135	1.5876	1.6235	1.53445	1.53395	1.6235	1.6235
		3A	1.6079	1.6250	1.54380	1.5923	1.6250	1.53820	1.53820	1.6250	1.6250
			1.6072	1.6257	1.54355	1.5916	1.6257	1.53845	1.53795	1.6257	1.6257
1 5/8–12 or 1.625–12	UN	2A	1.6103	1.6232	1.56910	1.5993	1.6232	1.56320	1.56320	1.6232	1.6232
			1.6097	1.6238	1.56885	1.5987	1.6238	1.56345	1.56295	1.6238	1.6238
		3A	1.6121	1.6250	1.57090	1.6026	1.6250	1.56650	1.56650	1.6250	1.6250
			1.6115	1.6256	1.57065	1.6020	1.6256	1.56675	1.56625	1.6256	1.6256
1 5/8–16 or 1.625–16	UN	2A	1.6129	1.6234	1.58280	1.6047	1.6234	1.57760	1.57760	1.6234	1.6234
			1.6123	1.6240	1.58255	1.6041	1.6240	1.57785	1.57735	1.6240	1.6240
		3A	1.6145	1.6250	1.58440	1.6076	1.6250	1.58050	1.58050	1.6250	1.6250
			1.6139	1.6256	1.58415	1.6070	1.6256	1.58075	1.58025	1.6256	1.6256
1 5/8–18 or 1.625–18	UNEF	2A	1.6138	1.6235	1.5874	1.6065	1.6235	1.5824	1.5824	1.6235	1.6235
			1.6133	1.6240	1.5872	1.6060	1.6240	1.5826	1.5822	1.6240	1.6240
		3A	1.6153	1.6250	1.5889	1.6093	1.6250	1.5852	1.5852	1.6250	1.6250
			1.6148	1.6255	1.5887	1.6088	1.6255	1.5854	1.5850	1.6255	1.6255
1 5/8–20 or 1.625–20	UN	2A	1.6146	1.6236	1.5911	1.6080	1.6236	1.5863	1.5863	1.6236	1.6236
			1.6141	1.6241	1.5909	1.6075	1.6241	1.5865	1.5861	1.6241	1.6241
		3A	1.6160	1.6250	1.5925	1.6106	1.6250	1.5889	1.5889	1.6250	1.6250
			1.6155	1.6255	1.5923	1.6101	1.6255	1.5891	1.5887	1.6255	1.6255

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
1 11/16–6 or 1.6875–6	UN	2A	1.6640	1.6850	1.57670	1.6406	1.6850	1.56840	1.56840	1.6850	1.6850
			1.6632	1.6858	1.57645	1.6398	1.6858	1.56865	1.56815	1.6858	1.6858
		3A	1.6665	1.6875	1.57920	1.6452	1.6875	1.57300	1.57300	1.6875	1.6875
			1.6657	1.6883	1.57895	1.6444	1.6883	1.57325	1.57275	1.6883	1.6883
1 11/16–8 or 1.6875–8	UN	2A	1.6682	1.6853	1.60410	1.6507	1.6853	1.59660	1.59660	1.6853	1.6853
			1.6675	1.6860	1.60385	1.6500	1.6860	1.59685	1.59635	1.6860	1.6860
		3A	1.6704	1.6875	1.60630	1.6548	1.6875	1.60070	1.60070	1.6875	1.6875
			1.6697	1.6882	1.60605	1.6541	1.6882	1.60095	1.60045	1.6882	1.6882
1 11/16–12 or 1.6875–12	UN	2A	1.6728	1.6857	1.63160	1.6617	1.6857	1.62560	1.62560	1.6857	1.6857
			1.6722	1.6863	1.63135	1.6611	1.6863	1.62585	1.62535	1.6863	1.6863
		3A	1.6746	1.6875	1.63340	1.6650	1.6875	1.62890	1.62890	1.6875	1.6875
			1.6740	1.6881	1.63315	1.6644	1.6881	1.62915	1.62865	1.6881	1.6881
1 11/16–16 or 1.6875–16	UN	2A	1.6754	1.6859	1.64530	1.6671	1.6859	1.64000	1.64000	1.6859	1.6859
			1.6748	1.6865	1.64505	1.6665	1.6865	1.64025	1.63975	1.6865	1.6865
		3A	1.6770	1.6875	1.64690	1.6700	1.6875	1.64290	1.64290	1.6875	1.6875
			1.6764	1.6881	1.64665	1.6694	1.6881	1.64315	1.64265	1.6881	1.6881
1 11/16–18 or 1.6875–18	UNEF	2A	1.6763	1.6860	1.6499	1.6689	1.6860	1.6448	1.6448	1.6860	1.6860
			1.6758	1.6865	1.6497	1.6684	1.6865	1.6450	1.6446	1.6865	1.6865
		3A	1.6778	1.6875	1.6514	1.6717	1.6875	1.6476	1.6476	1.6875	1.6875
			1.6773	1.6880	1.6512	1.6712	1.6880	1.6478	1.6474	1.6880	1.6880
1 11/16–20 or 1.6875–20	UN	2A	1.6770	1.6860	1.6535	1.6704	1.6860	1.6487	1.6487	1.6860	1.6860
			1.6765	1.6865	1.6533	1.6699	1.6865	1.6489	1.6485	1.6865	1.6865
		3A	1.6785	1.6875	1.6550	1.6731	1.6875	1.6514	1.6514	1.6875	1.6875
			1.6780	1.6880	1.6548	1.6726	1.6880	1.6516	1.6512	1.6880	1.6880
1 3/4–5 or 1.750–5	UNC	1A	1.7234	1.7473	1.61740	1.6906	1.7473	1.60400	1.60400	1.7473	1.7473
			1.7226	1.7481	1.61715	1.6898	1.7481	1.60425	1.60375	1.7481	1.7481
		2A	1.7234	1.7473	1.61740	1.6951	1.7473	1.60850	1.60850	1.7473	1.7473
			1.7226	1.7481	1.61715	1.6943	1.7481	1.60875	1.60825	1.7481	1.7481
		3A	1.7261	1.7500	1.62010	1.7000	1.7500	1.61340	1.61340	1.7500	1.7500
			1.7253	1.7508	1.61985	1.6992	1.7508	1.61365	1.61315	1.7508	1.7508
1 3/4–6 or 1.750–6	UN	2A	1.7265	1.7475	1.63920	1.7031	1.7475	1.63090	1.63090	1.7475	1.7475
			1.7257	1.7483	1.63895	1.7023	1.7483	1.63115	1.63065	1.7483	1.7483
		3A	1.7290	1.7500	1.64170	1.7076	1.7500	1.63540	1.63540	1.7500	1.7500
			1.7282	1.7508	1.64145	1.7068	1.7508	1.63565	1.63515	1.7508	1.7508
1 3/4–8 or 1.750–8	UN	2A	1.7306	1.7477	1.66650	1.7131	1.7477	1.65900	1.65900	1.7477	1.7477
			1.7299	1.7484	1.66625	1.7124	1.7484	1.65925	1.65875	1.7484	1.7484
		3A	1.7329	1.7500	1.66880	1.7172	1.7500	1.66310	1.66310	1.7500	1.7500
			1.7322	1.7507	1.66855	1.7165	1.7507	1.66335	1.66285	1.7507	1.7507
1 3/4–12 or 1.750–12	UN	2A	1.7353	1.7482	1.69410	1.7242	1.7482	1.68810	1.68810	1.7482	1.7482
			1.7347	1.7488	1.69385	1.7236	1.7488	1.68835	1.68785	1.7488	1.7488
		3A	1.7371	1.7500	1.69590	1.7275	1.7500	1.69140	1.69140	1.7500	1.7509
			1.7365	1.7506	1.69565	1.7269	1.7506	1.69165	1.69115	1.7506	1.7500
1 3/4–16 or 1.750–16	UN	2A	1.7379	1.7484	1.70780	1.7296	1.7484	1.70250	1.70250	1.7484	1.7484
			1.7373	1.7490	1.70755	1.7290	1.7490	1.70275	1.70225	1.7490	1.7490
		3A	1.7395	1.7500	1.70940	1.7325	1.7500	1.70540	1.70540	1.7500	1.7500
			1.7389	1.7506	1.70915	1.7319	1.7506	1.70565	1.70515	1.7506	1.7506
1 3/4–20 or 1.750–20	UN	2A	1.7395	1.7485	1.7160	1.7329	1.7485	1.7112	1.7112	1.7485	1.7485
			1.7390	1.7490	1.7158	1.7324	1.7490	1.7114	1.7110	1.7490	1.7490
		3A	1.7410	1.7500	1.7175	1.7356	1.7500	1.7139	1.7139	1.7500	1.7500
			1.7405	1.7505	1.7173	1.7351	1.7505	1.7141	1.7137	1.7505	1.7505
1 13/16–6 or 1.8125–6	UN	2A	1.7890	1.8100	1.70170	1.7655	1.8100	1.69330	1.69330	1.8100	1.8100
			1.7882	1.8108	1.70145	1.7647	1.8108	1.69355	1.69305	1.8108	1.8108
		3A	1.7915	1.8125	1.70420	1.7701	1.8125	1.69790	1.69790	1.8125	1.8125
			1.7907	1.8133	1.70395	1.7693	1.8133	1.69815	1.69765	1.8133	1.8133
1 13/16–8 or 1.8125–8	UN	2A	1.7931	1.8102	1.72900	1.7755	1.8102	1.72140	1.72140	1.8102	1.8102
			1.7924	1.8109	1.72875	1.7748	1.8109	1.72165	1.72115	1.8109	1.8109
		3A	1.7954	1.8125	1.73130	1.7797	1.8125	1.72560	1.72560	1.8125	1.8125
			1.7947	1.8132	1.73105	1.7790	1.8132	1.72585	1.72535	1.8132	1.8132
1 13/16–12 or 1.8125–12	UN	2A	1.7978	1.8107	1.75660	1.7867	1.8107	1.75060	1.75060	1.8107	1.8107
			1.7972	1.8113	1.75635	1.7861	1.8113	1.75085	1.75035	1.8113	1.8113
		3A	1.7996	1.8125	1.75840	1.7900	1.8125	1.75390	1.75390	1.8125	1.8125
			1.7990	1.8131	1.75815	1.7894	1.8131	1.75415	1.75365	1.8131	1.8131

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
Nominal size and threads per inch	Series designation	Class	Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for[a][b] GO thread gage	Plug for LO or NOT GO[a][c] thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1¹³⁄₁₆–16 or 1.8125–16	UN	2A	1.8004 1.7998	1.8109 1.8115	1.77030 1.77005	1.7921 1.7915	1.8109 1.8115	1.76500 1.76525	1.76500 1.76475	1.8109 1.8115	1.8109 1.8115
		3A	1.8020 1.8014	1.8125 1.8131	1.77190 1.77165	1.7950 1.7944	1.8125 1.8131	1.76790 1.76815	1.76790 1.76765	1.8125 1.8131	1.8125 1.8131
1¹³⁄₁₆–20 or 1.8125–20	UN	2A	1.8020 1.8015	1.8110 1.8115	1.7785 1.7783	1.7954 1.7949	1.8110 1.8115	1.7737 1.7739	1.7737 1.7735	1.8110 1.8115	1.8110 1.8115
		3A	1.8035 1.8030	1.8125 1.8130	1.7800 1.7798	1.7981 1.7976	1.8125 1.8130	1.7764 1.7766	1.7764 1.7762	1.8125 1.8130	1.8125 1.8130
1⅞–6 or 1.875–6	UN	2A	1.8515 1.8507	1.8725 1.8733	1.76420 1.76395	1.8280 1.8272	1.8725 1.8733	1.75580 1.75605	1.75580 1.75555	1.8725 1.8733	1.8725 1.8733
		3A	1.8540 1.8532	1.8750 1.8758	1.76670 1.76645	1.8326 1.8318	1.8750 1.8758	1.76040 1.76065	1.76040 1.76015	1.8750 1.8758	1.8750 1.875
1⅞–8 or 1.875–8	UN	2A	1.8556 1.8549	1.8727 1.8734	1.79150 1.79125	1.8379 1.8372	1.8727 1.8734	1.78380 1.78405	1.78380 1.78355	1.8727 1.8734	1.8727 1.8734
		3A	1.8579 1.8572	1.8750 1.8757	1.79380 1.79355	1.8422 1.8415	1.8750 1.8757	1.78810 1.78835	1.78810 1.78785	1.8750 1.8757	1.8750 1.8757
1⅞–12 or 1.875–12	UN	2A	1.8603 1.8597	1.8732 1.8738	1.81910 1.81885	1.8492 1.8486	1.8732 1.8738	1.81310 1.81335	1.81310 1.81285	1.8732 1.8738	1.8732 1.8738
		3A	1.8621 1.8615	1.8750 1.8756	1.82090 1.82065	1.8525 1.8519	1.8750 1.8756	1.81640 1.81665	1.81640 1.81615	1.8750 1.8756	1.8750 1.8756
1⅞–16 or 1.875–16	UN	2A	1.8629 1.8623	1.8734 1.8740	1.83280 1.83255	1.8546 1.8540	1.8734 1.8740	1.82750 1.82775	1.82750 1.82725	1.8734 1.8740	1.8734 1.8740
		3A	1.8645 1.8639	1.8750 1.8756	1.83440 1.83415	1.8575 1.8569	1.8750 1.8756	1.83040 1.83065	1.83040 1.83015	1.8750 1.8756	1.8750 1.8756
1⅞–20 or 1.875–20	UN	2A	1.8645 1.8640	1.8735 1.8740	1.8410 1.8408	1.8579 1.8574	1.8735 1.8740	1.8362 1.8364	1.8362 1.8360	1.8735 1.8740	1.8735 1.8740
		3A	1.8660 1.8655	1.8750 1.8755	1.8425 1.8423	1.8606 1.8601	1.8750 1.8755	1.8389 1.8391	1.8389 1.8387	1.8750 1.8755	1.8750 1.8755
1¹⁵⁄₁₆–6 or 1.9375–6	UN	2A	1.9139 1.9131	1.9349 1.9357	1.82660 1.82635	1.8903 1.8895	1.9349 1.9357	1.81810 1.81835	1.81810 1.81785	1.9349 1.9357	1.9349 1.9357
		3A	1.9165 1.9157	1.9375 1.9383	1.82920 1.82895	1.8950 1.8942	1.9375 1.9383	1.82280 1.82305	1.82280 1.82255	1.9375 1.9383	1.9375 1.9383
1¹⁵⁄₁₆–8 or 1.9375–8	UN	2A	1.9181 1.9174	1.9352 1.9359	1.85400 1.85375	1.9004 1.8997	1.9352 1.9359	1.84630 1.84655	1.84630 1.84605	1.9352 1.9359	1.9352 1.9359
		3A	1.9204 1.9197	1.9375 1.9382	1.85630 1.85605	1.9046 1.9039	1.9375 1.9382	1.85050 1.85075	1.85050 1.85025	1.9375 1.9382	1.9375 1.9382
1¹⁵⁄₁₆–12 or 1.9375–12	UN	2A	1.9228 1.9222	1.9357 1.9363	1.88160 1.88135	1.9116 1.9110	1.9357 1.9363	1.87550 1.87575	1.87550 1.87525	1.9357 1.9363	1.9357 1.9363
		3A	1.9246 1.9240	1.9375 1.9381	1.88340 1.88315	1.9150 1.9144	1.9375 1.9381	1.87890 1.87915	1.87890 1.87865	1.9375 1.9381	1.9375 1.9381
1¹⁵⁄₁₆–16 or 1.9375–16	UN	2A	1.9254 1.9248	1.9359 1.9365	1.89530 1.89505	1.9170 1.9164	1.9359 1.9365	1.88990 1.89015	1.88990 1.88965	1.9359 1.9365	1.9359 1.9365
		3A	1.9270 1.9264	1.9375 1.9381	1.89690 1.89665	1.9200 1.9194	1.9375 1.9381	1.89290 1.89315	1.89290 1.89265	1.9375 1.9381	1.9375 1.9381
1¹⁵⁄₁₆–20 or 1.9375–20	UN	2A	1.9270 1.9265	1.9360 1.9365	1.9035 1.9033	1.9203 1.9198	1.9360 1.9365	1.8986 1.8988	1.8986 1.8984	1.9360 1.9365	1.9360 1.9365
		3A	1.9285 1.9280	1.9375 1.9380	1.9050 1.9048	1.9230 1.9225	1.9375 1.9380	1.9013 1.9015	1.9013 1.9011	1.9375 1.9380	1.9375 1.9380
2–4½ or 2.000–4.5	UNC	1A	1.9713 1.9705	1.9971 1.9979	1.85280 1.85255	1.9347 1.9339	1.9971 1.9979	1.83850 1.83875	1.83850 1.83825	1.9971 1.9979	1.9971 1.9979
		2A	1.9713 1.9705	1.9971 1.9979	1.85280 1.85255	1.9395 1.9387	1.9971 1.9979	1.84330 1.84355	1.84330 1.84305	1.9971 1.9979	1.9971 1.9979
		3A	1.9742 1.9734	2.0000 2.0008	1.85570 1.85545	1.9448 1.9440	2.0000 2.0008	1.84860 1.84885	1.84860 1.84835	2.0000 2.0008	2.0000 2.0008
2–6 or 2.000–6	UN	2A	1.9764 1.9756	1.9974 1.9982	1.88910 1.88885	1.9527 1.9519	1.9974 1.9982	1.88050 1.88075	1.88050 1.88025	1.9974 1.9982	1.9974 1.9982
		3A	1.9790 1.9782	2.0000 2.0008	1.89170 1.89145	1.9575 1.9567	2.0000 2.0008	1.88530 1.88555	1.88530 1.88505	2.0000 2.0008	2.0000 2.0008
2–8 or 2.000–8	UN	2A	1.9806 1.9799	1.9977 1.9984	1.91650 1.91625	1.9628 1.9621	1.9977 1.9984	1.90870 1.90895	1.90870 1.90845	1.9977 1.9984	1.9977 1.9984
		3A	1.9829 1.9822	2.0000 2.0007	1.91880 1.91855	1.9671 1.9664	2.0000 2.0007	1.91300 1.91325	1.91300 1.91275	2.0000 2.0007	2.0000 2.0007

See footnotes at end of table.

Table III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2–12 or 2.000–12	UN	2A	1.9853	1.9982	1.94410	1.9741	1.9982	1.93800	1.93800	1.9982	1.9982
			1.9847	1.9988	1.94385	1.9735	1.9988	1.93825	1.93775	1.9988	1.9988
		3A	1.9871	2.0000	1.94590	1.9775	2.0000	1.94140	1.94140	2.0000	2.0000
			1.9865	2.0006	1.94565	1.9769	2.0006	1.94165	1.94115	2.0006	2.0006
2–16 or 2.000–16	UN	2A	1.9879	1.9984	1.95780	1.9795	1.9984	1.95240	1.95240	1.9984	1.9984
			1.9873	1.9990	1.95755	1.9789	1.9990	1.95265	1.95215	1.9990	1.9990
		3A	1.9895	2.0000	1.95940	1.9825	2.0000	1.95540	1.95540	2.0000	2.0000
			1.9889	2.0006	1.95915	1.9819	2.0006	1.95565	1.95515	2.0006	2.0006
2–20 or 2.000–20	UN	2A	1.9895	1.9985	1.9660	1.9828	1.9985	1.9611	1.9611	1.9985	1.9985
			1.9890	1.9990	1.9658	1.9823	1.9990	1.9613	1.9609	1.9990	1.9990
		3A	1.9910	2.0000	1.9675	1.9855	2.0000	1.9638	1.9638	2.0000	2.0000
			1.9905	2.0005	1.9673	1.9850	2.0005	1.9640	1.9636	2.0005	2.0005
2⅛–6 or 2.125–6	UN	2A	2.1014	2.1224	2.01410	2.0776	2.1224	2.00540	2.00540	2.1224	2.1224
			2.1006	2.1232	2.01385	2.0768	2.1232	2.00565	2.00515	2.1232	2.1232
		3A	2.1040	2.1250	2.01670	2.0824	2.1250	2.01020	2.01020	2.1250	2.1250
			2.1032	2.1258	2.01645	2.0816	2.1258	2.01045	2.00995	2.1258	2.1258
2⅛–8 or 2.125–8	UN	2A	2.1055	2.1226	2.04140	2.0876	2.1226	2.03350	2.03350	2.1226	2.1226
			2.1048	2.1233	2.04115	2.0869	2.1233	2.03375	2.03325	2.1233	2.1233
		3A	2.1079	2.1250	2.04380	2.0920	2.1250	2.03790	2.03790	2.1250	2.1250
			2.1072	2.1257	2.04355	2.0913	2.1257	2.03815	2.03765	2.1257	2.1257
2⅛–12 or 2.125–12	UN	2A	2.1103	2.1232	2.06910	2.0991	2.1232	2.06300	2.06300	2.1232	2.1232
			2.1097	2.1238	2.06885	2.0985	2.1238	2.06325	2.06275	2.1238	2.1238
		3A	2.1121	2.1250	2.07090	2.1025	2.1250	2.06640	2.06640	2.1250	2.1250
			2.1115	2.1256	2.07065	2.1019	2.1256	2.06665	2.06615	2.1256	2.1256
2⅛–16 or 2.125–16	UN	2A	2.1129	2.1234	2.08280	2.1045	2.1234	2.07740	2.07740	2.1234	2.1234
			2.1123	2.1240	2.08255	2.1039	2.1240	2.07765	2.07715	2.1240	2.1240
		3A	2.1145	2.1250	2.08440	2.1075	2.1250	2.08040	2.08040	2.1250	2.1250
			2.1139	2.1256	2.08415	2.1069	2.1256	2.08065	2.08015	2.1256	2.1256
2⅛–20 or 2.125–20	UN	2A	2.1145	2.1235	2.0910	2.1078	2.1235	2.0861	2.0861	2.1235	2.1235
			2.1140	2.1240	2.0908	2.1073	2.1240	2.0863	2.0859	2.1240	2.1240
		3A	2.1160	2.1250	2.0925	2.1105	2.1250	2.0888	2.0888	2.1250	2.1250
			2.1155	2.1255	2.0923	2.1100	2.1255	2.0890	2.0886	2.1255	2.1255
2¼–4½ or 2.250–4.5	UNC	1A	2.2213	2.2471	2.10280	2.1844	2.2471	2.08820	2.08820	2.2471	2.2471
			2.2205	2.2479	2.10255	2.1836	2.2479	2.08845	2.08795	2.2479	2.2479
		2A	2.2213	2.2471	2.10280	2.1893	2.2471	2.09310	2.09310	2.2471	2.2471
			2.2205	2.2479	2.10255	2.1885	2.2479	2.09335	2.09285	2.2479	2.2479
		3A	2.2242	2.2500	2.10570	2.1946	2.2500	2.09840	2.09840	2.2500	2.2500
			2.2234	2.2508	2.10545	2.1938	2.2508	2.09865	2.09815	2.2508	2.2508
2¼–6 or 2.250–6	UN	2A	2.2264	2.2474	2.13910	2.2025	2.2474	2.13030	2.13030	2.2474	2.2474
			2.2256	2.2482	2.13885	2.2017	2.2482	2.13055	2.13005	2.2482	2.2482
		3A	2.2290	2.2500	2.14170	2.2073	2.2500	2.13510	2.13510	2.2500	2.2500
			2.2282	2.2508	2.14145	2.2065	2.2508	2.13535	2.13485	2.2508	2.2508
2¼–8 or 2.250–8	UN	2A	2.2305	2.2476	2.16640	2.2125	2.2476	2.15840	2.15840	2.2476	2.2476
			2.2298	2.2483	2.16615	2.2118	2.2483	2.15865	2.15815	2.2483	2.2483
		3A	2.2329	2.2500	2.16880	2.2169	2.2500	2.16280	2.16280	2.2500	2.2500
			2.2322	2.2507	2.16855	2.2162	2.2507	2.16305	2.16255	2.2507	2.2507
2¼–12 or 2.250–12	UN	2A	2.2353	2.2482	2.19410	2.2241	2.2482	2.18800	2.18800	2.2482	2.2482
			2.2347	2.2488	2.19385	2.2235	2.2488	2.18825	2.18775	2.2488	2.2488
		3A	2.2371	2.2500	2.19590	2.2275	2.2500	2.19140	2.19140	2.2500	2.2500
			2.2365	2.2506	2.19565	2.2269	2.2506	2.19165	2.19115	2.2506	2.2506
2¼–16 or 2.250–16	UN	2A	2.2379	2.2484	2.20780	2.2295	2.2484	2.20240	2.20240	2.2484	2.2484
			2.2373	2.2490	2.20755	2.2289	2.2490	2.20265	2.20215	2.2490	2.2490
		3A	2.2395	2.2500	2.20940	2.2325	2.2500	2.20540	2.20540	2.2500	2.2500
			2.2389	2.2506	2.20915	2.2319	2.2506	2.20565	2.20515	2.2506	2.2506
2¼–20 or 2.250–20	UN	2A	2.2395	2.2485	2.2160	2.2328	2.2485	2.2111	2.2111	2.2485	2.2485
			2.2390	2.2490	2.2158	2.2323	2.2490	2.2113	2.2109	2.2490	2.2490
		3A	2.2410	2.2500	2.2175	2.2355	2.2500	2.2138	2.2138	2.2500	2.2500
			2.2405	2.2505	2.2173	2.2350	2.2505	2.2140	2.2136	2.2505	2.2505
2⅜–6 or 2.375–6	UN	2A	2.3513	2.3723	2.26400	2.3273	2.3723	2.25510	2.25510	2.3723	2.3723
			2.3505	2.3731	2.26375	2.3265	2.3731	2.25535	2.25485	2.3731	2.3731
		3A	2.3540	2.3750	2.26670	2.3323	2.3750	2.26010	2.26010	2.3750	2.3750
			2.3532	2.3758	2.26645	2.3315	2.3758	2.26035	2.25985	2.3758	2.3758

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a b]	Plug for LO or NOT GO thread gage [a c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2⅜–8 or 2.375–8	UN	2A	2.3555 2.3548	2.3726 2.3733	2.29140 2.29115	2.3374 2.3367	2.3726 2.3733	2.28330 2.28355	2.28330 2.28305	2.3726 2.3733	2.3726 2.3733
		3A	2.3579 2.3572	2.3750 2.3757	2.29380 2.29355	2.3419 2.3412	2.3750 2.3757	2.28780 2.28805	2.28780 2.28755	2.3750 2.3757	2.3750 2.3757
2⅜–12 or 2.375–12	UN	2A	2.3602 2.3596	2.3731 2.3737	2.31900 2.31875	2.3489 2.3483	2.3731 2.3737	2.31280 2.31305	2.31280 2.31255	2.3731 2.3737	2.3731 2.3737
		3A	2.3621 2.3615	2.3750 2.3756	2.32090 2.32065	2.3524 2.3518	2.3750 2.3756	2.31630 2.31655	2.31630 2.31605	2.3750 2.3756	2.3750 2.3756
2⅜–16 or 2.375–16	UN	2A	2.3628 2.3622	2.3733 2.3739	2.33270 2.33245	2.3543 2.3537	2.3733 2.3739	2.32720 2.32745	2.32720 2.32695	2.3733 2.3739	2.3733 2.3739
		3A	2.3645 2.3639	2.3750 2.3756	2.33440 2.33415	2.3574 2.3568	2.3750 2.3756	2.33030 2.33055	2.33030 2.33005	2.3750 2.3756	2.3750 2.3756
2⅜–20 or 2.375–20	UN	2A	2.3645 2.3640	2.3735 2.3740	2.3410 2.3408	2.3576 2.3571	2.3734 2.3739	2.3359 2.3361	2.3359 2.3357	2.3735 2.3740	2.3734 2.3739
		3A	2.3660 2.3655	2.3750 2.3755	2.3425 2.3423	2.3604 2.3599	2.3750 2.3755	2.3387 2.3389	2.3387 2.3385	2.3750 2.3755	2.3750 2.3755
2½–4 or 2.500–4	UNC	1A	2.4688 2.4679	2.4969 2.4978	2.33450 2.33425	2.4273 2.4264	2.4969 2.4978	2.31900 2.31925	2.31900 2.31875	2.4969 2.4978	2.4969 2.4978
		2A	2.4688 2.4679	2.4969 2.4978	2.33450 2.33425	2.4324 2.4315	2.4969 2.4978	2.32410 2.32435	2.32410 2.32385	2.4969 2.4978	2.4969 2.4978
		3A	2.4719 2.4710	2.5000 2.5009	2.33760 2.33735	2.4381 2.4372	2.5000 2.5009	2.32980 2.33005	2.32980 2.32955	2.5000 2.5009	2.5000 2.5009
2½–6 or 2.500–6	UN	2A	2.4763 2.4755	2.4973 2.4981	2.38900 2.38875	2.4522 2.4514	2.4973 2.4981	2.38000 2.38025	2.38000 2.37975	2.4973 2.4981	2.4973 2.4981
		3A	2.4790 2.4782	2.5000 2.5008	2.39170 2.39145	2.4572 2.4564	2.5000 2.5008	2.38500 2.38525	2.38500 2.38475	2.5000 2.5008	2.5000 2.5008
2½–8 or 2.500–8	UN	2A	2.4805 2.4798	2.4976 2.4983	2.41640 2.41615	2.4623 2.4616	2.4976 2.4983	2.40820 2.40845	2.40820 2.40795	2.4976 2.4983	2.4976 2.4983
		3A	2.4829 2.4822	2.5000 2.5007	2.41880 2.41855	2.4668 2.4661	2.5000 2.5007	2.41270 2.41295	2.41270 2.41245	2.5000 2.5007	2.5000 2.5007
2½–12 or 2.500–12	UN	2A	2.4852 2.4846	2.4981 2.4987	2.44400 2.44375	2.4739 2.4733	2.4981 2.4987	2.43780 2.43805	2.43780 2.43755	2.4981 2.4987	2.4981 2.4987
		3A	2.4871 2.4865	2.5000 2.5006	2.44590 2.44565	2.4774 2.4768	2.5000 2.5006	2.44130 2.44155	2.44130 2.44105	2.5000 2.5006	2.5000 2.5006
2½–16 or 2.500–16	UN	2A	2.4878 2.4872	2.4983 2.4989	2.45770 2.45745	2.4793 2.4787	2.4983 2.4989	2.45220 2.45245	2.45220 2.45195	2.4983 2.4989	2.4983 2.4989
		3A	2.4895 2.4889	2.5000 2.5006	2.45940 2.45915	2.4824 2.4818	2.5000 2.5006	2.45530 2.45555	2.45530 2.45505	2.5000 2.5006	2.5000 2.5006
2½–20 or 2.500–20	UN	2A	2.4895 2.4890	2.4985 2.4990	2.4660 2.4658	2.4826 2.4821	2.4984 2.4989	2.4609 2.4611	2.4609 2.4607	2.4985 2.4990	2.4984 2.4989
		3A	2.4910 2.4905	2.5000 2.5005	2.4675 2.4673	2.4854 2.4849	2.5000 2.5005	2.4637 2.4639	2.4637 2.4635	2.5000 2.5005	2.5000 2.5005
2⅝–6 or 2.625–6	UN	2A	2.6013 2.6005	2.6223 2.6231	2.51400 2.51375	2.5772 2.5764	2.6223 2.6231	2.50500 2.50525	2.50500 2.50475	2.6223 2.6231	2.6223 2.6231
		3A	2.6040 2.6032	2.6250 2.6258	2.51670 2.51645	2.5821 2.5813	2.6250 2.6258	2.50990 2.51015	2.50990 2.50965	2.6250 2.6258	2.6250 2.6258
2⅝–8 or 2.625–8	UN	2A	2.6054 2.6047	2.6225 2.6232	2.54130 2.54105	2.5872 2.5865	2.6225 2.6232	2.53310 2.53335	2.53310 2.53285	2.6225 2.6232	2.6225 2.6232
		3A	2.6079 2.6072	2.6250 2.6257	2.54380 2.54355	2.5917 2.5910	2.6250 2.6257	2.53760 2.53785	2.53760 2.53735	2.6250 2.6257	2.6250 2.6257
2⅝–12 or 2.625–12	UN	2A	2.6102 2.6096	2.6231 2.6237	2.56900 2.56875	2.5989 2.5983	2.6231 2.6237	2.56280 2.56305	2.56280 2.56255	2.6231 2.6237	2.6231 2.6237
		3A	2.6121 2.6115	2.6250 2.6256	2.57090 2.57065	2.6024 2.6018	2.6250 2.6256	2.56630 2.56655	2.56630 2.56605	2.6250 2.6256	2.6250 2.6256
2⅝–16 or 2.625–16	UN	2A	2.6128 2.6122	2.6233 2.6239	2.58270 2.58245	2.6043 2.6037	2.6233 2.6239	2.57720 2.57745	2.57720 2.57695	2.6233 2.6239	2.6233 2.6239
		3A	2.6145 2.6139	2.6250 2.6256	2.58440 2.58415	2.6074 2.6068	2.6250 2.6256	2.58030 2.58055	2.58030 2.58005	2.6250 2.6256	2.6250 2.6256
2⅝–20 or 2.625–20	UN	2A	2.6145 2.6140	2.6235 2.6240	2.5910 2.5908	2.6076 2.6071	2.6234 2.6239	2.5859 2.5861	2.5859 2.5857	2.6235 2.6240	2.6234 2.6239
		3A	2.6160 2.6155	2.6250 2.6255	2.5925 2.5923	2.6104 2.6099	2.6250 2.6255	2.5887 2.5889	2.5887 2.5885	2.6250 2.6255	2.6250 2.6255

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
2¾–4 or 2.750–4	UNC	1A	2.7187	2.7468	2.58440	2.6769	2.7468	2.56860	2.56860	2.7468	2.7468
			2.7178	2.7477	2.58415	2.6760	2.7477	2.56835	2.56835	2.7477	2.7477
		2A	2.7187	2.7468	2.58440	2.6822	2.7468	2.57390	2.57390	2.7468	2.7468
			2.7178	2.7477	2.58415	2.6813	2.7477	2.57415	2.57365	2.7477	2.7477
		3A	2.7219	2.7500	2.58760	2.6880	2.7500	2.57970	2.57970	2.7500	2.7500
			2.7210	2.7509	2.58735	2.6871	2.7509	2.57995	2.57945	2.7509	2.7509
2¾–6 or 2.750–6	UN	2A	2.7263	2.7473	2.63900	2.7021	2.7473	2.62990	2.62990	2.7473	2.7473
			2.7255	2.7481	2.63875	2.7013	2.7481	2.63015	2.62965	2.7481	2.7481
		3A	2.7290	2.7500	2.64170	2.7071	2.7500	2.63490	2.63490	2.7500	2.7500
			2.7282	2.7508	2.64145	2.7063	2.7508	2.63515	2.63465	2.7508	2.7508
2¾–8 or 2.750–8	UN	2A	2.7304	2.7475	2.66630	2.7121	2.7475	2.65800	2.65800	2.7475	2.7475
			2.7297	2.7482	2.66605	2.7114	2.7482	2.65825	2.65775	2.7482	2.7482
		3A	2.7329	2.7500	2.66880	2.7167	2.7500	2.66250	2.66250	2.7500	2.7500
			2.7322	2.7507	2.66855	2.7160	2.7507	2.66275	2.66225	2.7507	2.7507
2¾–12 or 2.750–12	UN	2A	2.7352	2.7481	2.69400	2.7239	2.7481	2.68780	2.68780	2.7481	2.7481
			2.7346	2.7487	2.69375	2.7233	2.7487	2.68805	2.68755	2.7487	2.7487
		3A	2.7371	2.7500	2.69590	2.7274	2.7500	2.69130	2.69130	2.7500	2.7500
			2.7365	2.7506	2.69565	2.7268	2.7506	2.69155	2.69105	2.7506	2.7506
2¾–16 or 2.750–16	UN	2A	2.7378	2.7483	2.70770	2.7293	2.7483	2.70220	2.70220	2.7483	2.7483
			2.7372	2.7489	2.70745	2.7287	2.7489	2.70245	2.70195	2.7489	2.7489
		3A	2.7395	2.7500	2.70940	2.7324	2.7500	2.70530	2.70530	2.7500	2.7500
			2.7389	2.7506	2.70915	2.7318	2.7506	2.70555	2.70505	2.7506	2.7506
2¾–20 or 2.750–20	UN	2A	2.7395	2.7485	2.7160	2.7326	2.7484	2.7109	2.7109	2.7485	2.7484
			2.7390	2.7490	2.7158	2.7321	2.7489	2.7111	2.7107	2.7490	2.7489
		3A	2.7410	2.7500	2.7175	2.7354	2.7500	2.7137	2.7137	2.7500	2.7500
			2.7405	2.7505	2.7173	2.7349	2.7505	2.7139	2.7135	2.7505	2.7505
2⅞–6 or 2.875–6	UN	2A	2.8512	2.8722	2.76390	2.8269	2.8722	2.75470	2.75470	2.8722	2.8722
			2.8504	2.8730	2.76365	2.8261	2.8730	2.75495	2.75445	2.8730	2.8730
		3A	2.8540	2.8750	2.76670	2.8320	2.8750	2.75980	2.75980	2.8750	2.8750
			2.8532	2.8758	2.76645	2.8312	2.8758	2.76005	2.75955	2.8758	2.8758
2⅞–8 or 2.875–8	UN	2A	2.8554	2.8725	2.79130	2.8370	2.8725	2.78290	2.78290	2.8725	2.8725
			2.8547	2.8732	2.79105	2.8363	2.8732	2.78315	2.78265	2.8732	2.8732
		3A	2.8579	2.8750	2.79380	2.8416	2.8750	2.78750	2.78750	2.8750	2.8750
			2.8572	2.8757	2.79355	2.8409	2.8757	2.78775	2.78725	2.8757	2.8757
2⅞–12 or 2.875–12	UN	2A	2.8602	2.8731	2.81900	2.8488	2.8731	2.81270	2.81270	2.8731	2.8731
			2.8596	2.8737	2.81875	2.8482	2.8737	2.81295	2.81245	2.8737	2.8737
		3A	2.8621	2.8750	2.82090	2.8523	2.8750	2.81620	2.81620	2.8750	2.8750
			2.8615	2.8756	2.82065	2.8517	2.8756	2.81645	2.81595	2.8756	2.8756
2⅞–16 or 2.875–16	UN	2A	2.8628	2.8733	2.83270	2.8542	2.8733	2.82710	2.82710	2.8733	2.8733
			2.8622	2.8739	2.83245	2.8536	2.8739	2.82735	2.82685	2.8739	2.8739
		3A	2.8645	2.8750	2.83440	2.8573	2.8750	2.83020	2.83020	2.8750	2.8750
			2.8639	2.8756	2.83415	2.8567	2.8756	2.83045	2.82995	2.8756	2.8756
2⅞–20 or 2.875–20	UN	2A	2.8644	2.8734	2.8409	2.8574	2.8732	2.8357	2.8357	2.8734	2.8732
			2.8639	2.8739	2.8407	2.8569	2.8737	2.8359	2.8355	2.8739	2.8737
		3A	2.8660	2.8750	2.8425	2.8603	2.8750	2.8386	2.8386	2.8750	2.8750
			2.8655	2.8755	2.8423	2.8598	2.8755	2.8388	2.8384	2.8755	2.8755
3–4 or 3.000–4	UNC	1A	2.9687	2.9968	2.83440	2.9266	2.9968	2.81830	2.81830	2.9968	2.9968
			2.9678	2.9977	2.83415	2.9257	2.9977	2.81855	2.81805	2.9977	2.9977
		2A	2.9687	2.9968	2.83440	2.9320	2.9968	2.82370	2.82370	2.9968	2.9968
			2.9678	2.9977	2.83415	2.9311	2.9977	2.82395	2.82345	2.9977	2.9977
		3A	2.9719	3.0000	2.83760	2.9379	3.0000	2.82960	2.82960	3.0000	3.0000
			2.9710	3.0009	2.83735	2.9370	3.0009	2.82985	2.82935	3.0009	3.0009
3–6 or 3.000–6	UN	2A	2.9762	2.9972	2.88890	2.9518	2.9972	2.87960	2.87960	2.9972	2.9972
			2.9754	2.9980	2.88865	2.9510	2.9980	2.87985	2.87935	2.9980	2.9980
		3A	2.9790	3.0000	2.89170	2.9569	3.0000	2.88470	2.88470	3.0000	3.0000
			2.9782	3.0008	2.89145	2.9561	3.0008	2.88495	2.88445	3.0008	3.0008
3–8 or 3.000–8	UN	2A	2.9803	2.9974	2.91620	2.9618	2.9974	2.90770	2.90770	2.9974	2.9974
			2.9796	2.9981	2.91595	2.9611	2.9981	2.90795	2.90745	2.9981	2.9981
		3A	2.9829	3.0000	2.91880	2.9665	3.0000	2.91240	2.91240	3.0000	3.0000
			2.9822	3.0007	2.91855	2.9658	3.0007	2.91265	2.91215	3.0007	3.0007
3–12 or 3.000–12	UN	2A	2.9852	2.9981	2.94400	2.9738	2.9981	2.93770	2.93770	2.9981	2.9981
			2.9846	2.9987	2.94375	2.9732	2.9987	2.93795	2.93745	2.9987	2.9987
		3A	2.9871	3.0000	2.94590	2.9773	3.0000	2.94120	2.94120	3.0000	3.0000
			2.9865	3.0006	2.94565	2.9767	3.0006	2.94145	2.94095	3.0006	3.0006

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a,b]	Plug for LO or NOT GO thread gage [a,c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
3–16 or 3.000–16	UN	2A	*in.* 2.9878 2.9872	*in.* 2.9983 2.9989	*in.* 2.95770 2.95745	*in.* 2.9792 2.9786	*in.* 2.9983 2.9989	*in.* 2.95210 2.95235	*in.* 2.95210 2.95185	*in.* 2.9983 2.9989	*in.* 2.9983 2.9989
		3A	2.9895 2.9889	3.0000 3.0006	2.95940 2.95915	2.9823 2.9817	3.0000 3.0006	2.95520 2.95545	2.95520 2.95495	3.0000 3.0006	3.0000 3.0006
3–20 or 3.000–20	UN	2A	2.9894 2.9889	2.9984 2.9989	2.9659 2.9657	2.9824 2.9819	2.9982 2.9987	2.9607 2.9609	2.9607 2.9605	2.9984 2.9989	2.9982 2.9987
		3A	2.9910 2.9905	3.0000 3.0005	2.9675 2.9673	2.9853 2.9848	3.0000 3.0005	2.9636 2.9638	2.9636 2.9634	3.0000 3.0005	3.0000 3.0005
3⅛–6 or 3.125–6	UN	2A	3.1012 3.1004	3.1222 3.1230	3.01390 3.01365	3.0767 3.0759	3.1222 3.1230	3.00450 3.00475	3.00450 3.00425	3.1222 3.1230	3.1222 3.1230
		3A	3.1040 3.1032	3.1250 3.1258	3.01670 3.01645	3.0819 3.0811	3.1250 3.1258	3.00970 3.00995	3.00970 3.00945	3.1250 3.1258	3.1250 3.1258
3⅛–8 or 3.125–8	UN	2A	3.1053 3.1046	3.1224 3.1231	3.04120 3.04095	3.0867 3.0860	3.1224 3.1231	3.03260 3.03285	3.03260 3.03235	3.1224 3.1231	3.1224 3.1231
		3A	3.1079 3.1072	3.1250 3.1257	3.04380 3.04355	3.0915 3.0908	3.1250 3.1257	3.03740 3.03765	3.03740 3.03715	3.1250 3.1257	3.1250 3.1257
3⅛–12 or 3.125–12	UN	2A	3.1102 3.1096	3.1231 3.1237	3.06900 3.06875	3.0988 3.0982	3.1231 3.1237	3.06270 3.06295	3.06270 3.06245	3.1231 3.1237	3.1231 3.1237
		3A	3.1121 3.1115	3.1250 3.1256	3.07090 3.07065	3.1023 3.1017	3.1250 3.1256	3.06620 3.06645	3.06620 3.06595	3.1250 3.1256	3.1250 3.1256
3⅛–16 or 3.125–16	UN	2A	3.1128 3.1122	3.1233 3.1239	3.08270 3.08245	3.1042 3.1036	3.1233 3.1239	3.07710 3.07735	3.07710 3.07685	3.1233 3.1239	3.1233 3.1239
		3A	3.1145 3.1139	3.1250 3.1256	3.08440 3.08415	3.1073 3.1067	3.1250 3.1256	3.08020 3.08045	3.08020 3.07995	3.1250 3.1256	3.1250 3.1256
3¼–4 or 3.250–4	UNC	1A	3.2186 3.2177	3.2467 3.2476	3.08430 3.08405	3.1763 3.1754	3.2467 3.2476	3.06800 3.06825	3.06800 3.06775	3.2467 3.2476	3.2467 3.2476
		2A	3.2186 3.2177	3.2467 3.2476	3.08430 3.08405	3.1817 3.1808	3.2467 3.2476	3.07340 3.07365	3.07340 3.07315	3.2467 3.2476	3.2467 3.2476
		3A	3.2219 3.2210	3.2500 3.2509	3.08760 3.08735	3.1877 3.1868	3.2500 3.2509	3.07940 3.07965	3.07940 3.07915	3.2500 3.2509	3.2500 3.2509
3¼–6 or 3.250–6	UN	2A	3.2262 3.2254	3.2472 3.2480	3.13890 3.13865	3.2016 3.2008	3.2472 3.2480	3.12940 3.12965	3.12940 3.12915	3.2472 3.2480	3.2472 3.2480
		3A	3.2290 3.2282	3.2500 3.2508	3.14170 3.14145	3.2068 3.2060	3.2500 3.2508	3.13460 3.13485	3.13460 3.13435	3.2500 3.2508	3.2500 3.2508
3¼–8 or 3.250–8	UN	2A	3.2303 3.2296	3.2474 3.2481	3.16620 3.16595	3.2116 3.2109	3.2474 3.2481	3.15750 3.15775	3.15750 3.15725	3.2474 3.2481	3.2474 3.2481
		3A	3.2329 3.2322	3.2500 3.2507	3.16880 3.16855	3.2164 3.2157	3.2500 3.2507	3.16230 3.16255	3.16230 3.16205	3.2500 3.2507	3.2500 3.2507
3¼–12 or 3.250–12	UN	2A	3.2352 3.2346	3.2481 3.2487	3.19400 3.19375	3.2238 3.2232	3.2481 3.2487	3.18770 3.18795	3.18770 3.18745	3.2481 3.2487	3.2481 3.2487
		3A	3.2371 3.2365	3.2500 3.2506	3.19590 3.19565	3.2273 3.2267	3.2500 3.2506	3.19120 3.19145	3.19120 3.19095	3.2500 3.2506	3.2500 3.2506
3¼–16 or 3.250–16	UN	2A	3.2378 3.2372	3.2483 3.2489	3.20770 3.20745	3.2292 3.2286	3.2483 3.2489	3.20210 3.20235	3.20210 3.20185	3.2483 3.2489	3.2483 3.2489
		3A	3.2395 3.2389	3.2500 3.2506	3.20940 3.20915	3.2323 3.2317	3.2500 3.2506	3.20520 3.20545	3.20520 3.20495	3.2500 3.2506	3.2500 3.2506
3⅜–6 or 3.375–6	UN	2A	3.3511 3.3503	3.3721 3.3729	3.26380 3.26355	3.3265 3.3257	3.3721 3.3729	3.25430 3.25455	3.25430 3.25405	3.3721 3.3729	3.3721 3.3729
		3A	3.3540 3.3532	3.3750 3.3758	3.26670 3.26645	3.3317 3.3309	3.3750 3.3758	3.25950 3.25975	3.25950 3.25925	3.3750 3.3758	3.3750 3.3758
3⅜–8 or 3.375–8	UN	2A	3.3553 3.3546	3.3724 3.3731	3.29120 3.29095	3.3365 3.3358	3.3724 3.3731	3.28240 3.28265	3.28240 3.28215	3.3724 3.3731	3.3724 3.3731
		3A	3.3579 3.3572	3.3750 3.3757	3.29380 3.29355	3.3413 3.3406	3.3750 3.3757	3.28720 3.28745	3.28720 3.28695	3.3750 3.3757	3.3750 3.3757
3⅜–12 or 3.375–12	UN	2A	3.3602 3.3596	3.3731 3.3737	3.31900 3.31875	3.3487 3.3481	3.3731 3.3737	3.31260 3.31285	3.31260 3.31235	3.3731 3.3737	3.3731 3.3737
		3A	3.3621 3.3615	3.3750 3.3756	3.32090 3.32065	3.3522 3.3516	3.3750 3.3756	3.31610 3.31635	3.31610 3.31585	3.3750 3.3756	3.3750 3.3756
3⅜–16 or 3.375–16	UN	2A	3.3628 3.3622	3.3733 3.3739	3.33270 3.33245	3.3540 3.3534	3.3733 3.3739	3.32690 3.32715	3.32690 3.32665	3.3733 3.3739	3.3733 3.3739
		3A	3.3645 3.3639	3.3750 3.3756	3.33440 3.33415	3.3572 3.3566	3.3750 3.3756	3.33010 3.33035	3.33010 3.32985	3.3750 3.3756	3.3750 3.3756

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a,b]	Plug for LO or NOT GO thread gage [a,c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
3½–4 or 3.500–4	UNC	1A	3.4686 3.4677	3.4967 3.4976	3.33430 3.33405	3.4260 3.4251	3.4967 3.4976	3.31770 3.31795	3.31770 3.31745	3.4967 3.4976	3.4967 3.4976
		2A	3.4686 3.4677	3.4967 3.4976	3.33430 3.33405	3.4316 3.4307	3.4967 3.4976	3.32330 3.32355	3.32330 3.32305	3.4967 3.4976	3.4967 3.4976
		3A	3.4719 3.4710	3.5000 3.5009	3.33760 3.33735	3.4376 3.4367	3.5000 3.5009	3.32930 3.32955	3.32930 3.32905	3.5000 3.5009	3.5000 3.5009
3½–6 or 3.500–6	UN	2A	3.4761 3.4753	3.4971 3.4979	3.38880 3.38855	3.4514 3.4506	3.4971 3.4979	3.37920 3.37945	3.37920 3.37895	3.4971 3.4979	3.4971 3.4979
		3A	3.4790 3.4782	3.5000 3.5008	3.39170 3.39145	3.4567 3.4559	3.5000 3.5008	3.38450 3.38475	3.38450 3.38425	3.5000 3.5008	3.5000 3.5008
3½–8 or 3.500–8	UN	2A	3.4803 3.4796	3.4974 3.4981	3.41620 3.41595	3.4615 3.4608	3.4974 3.4981	3.40740 3.40765	3.40740 3.40715	3.4974 3.4981	3.4974 3.4981
		3A	3.4829 3.4822	3.5000 3.5007	3.41880 3.41855	3.4663 3.4656	3.5000 3.5007	3.41220 3.41245	3.41220 3.41195	3.5000 3.5007	3.5000 3.5007
3½–12 or 3.500–12	UN	2A	3.4852 3.4846	3.4981 3.4987	3.44400 3.44375	3.4737 3.4731	3.4981 3.4987	3.43760 3.43785	3.43760 3.43735	3.4981 3.4987	3.4981 3.4987
		3A	3.4871 3.4865	3.5000 3.5006	3.44590 3.44565	3.4772 3.4766	3.5000 3.5006	3.44110 3.44135	3.44110 3.44085	3.5000 3.5006	3.5000 3.5006
3½–16 or 3.500–16	UN	2A	3.4878 3.4872	3.4983 3.4989	3.45770 3.45745	3.4790 3.4784	3.4983 3.4989	3.45190 3.45215	3.45190 3.45165	3.4983 3.4989	3.4983 3.4989
		3A	3.4895 3.4889	3.5000 3.5006	3.45940 3.45915	3.4822 3.4816	3.5000 3.5006	3.45510 3.45535	3.45510 3.45485	3.5000 3.5006	3.5000 3.5006
3⅝–6 or 3.625–6	UN	2A	3.6011 3.6003	3.6221 3.6229	3.51380 3.51355	3.5763 3.5755	3.6221 3.6229	3.50410 3.50435	3.50410 3.50385	3.6221 3.6229	3.6221 3.6229
		3A	3.6040 3.6032	3.6250 3.6258	3.51670 3.51645	3.5816 3.5808	3.6250 3.6258	3.50940 3.50965	3.50940 3.50915	3.6250 3.6258	3.6250 3.6258
3⅝–8 or 3.625–8	UN	2A	3.6052 3.6045	3.6223 3.6230	3.54110 3.54085	3.5863 3.5856	3.6223 3.6230	3.53220 3.53245	3.53220 3.53195	3.6223 3.6230	3.6223 3.6230
		3A	3.6079 3.6072	3.6250 3.6257	3.54380 3.54355	3.5912 3.5905	3.6250 3.6257	3.53710 3.53735	3.53710 3.53685	3.6250 3.6257	3.6250 3.6257
3⅝–12 or 3.625–12	UN	2A	3.6102 3.6096	3.6231 3.6237	3.56900 3.56875	3.5987 3.5981	3.6231 3.6237	3.56260 3.56285	3.56260 3.56235	3.6231 3.6237	3.6231 3.6237
		3A	3.6121 3.6115	3.6250 3.6256	3.57090 3.57065	3.6022 3.6016	3.6250 3.6256	3.56610 3.56635	3.56610 3.56585	3.6250 3.6256	3.6250 3.6256
3⅝–16 or 3.625–16	UN	2A	3.6128 3.6122	3.6233 3.6239	3.58270 3.58245	3.6040 3.6034	3.6233 3.6239	3.57690 3.57715	3.57690 3.57665	3.6233 3.6239	3.6233 3.6239
		3A	3.6145 3.6139	3.6250 3.6256	3.58440 3.58415	3.6072 3.6066	3.6250 3.6256	3.58010 3.58035	3.58010 3.57985	3.6250 3.6256	3.6250 3.6256
3¾–4 or 3.750–4	UNC	1A	3.7185 3.7176	3.7466 3.7475	3.58420 3.58395	3.6757 3.6748	3.7466 3.7475	3.56740 3.56765	3.56740 3.56715	3.7466 3.7475	3.7466 3.7475
		2A	3.7185 3.7176	3.7466 3.7475	3.58420 3.58395	3.6813 3.6804	3.7466 3.7475	3.57300 3.57325	3.57300 3.57275	3.7466 3.7475	3.7466 3.7475
		3A	3.7219 3.7210	3.7500 3.7509	3.58760 3.58735	3.6875 3.6866	3.7500 3.7509	3.57920 3.57945	3.57920 3.57895	3.7500 3.7509	3.7500 3.7509
3¾–6 or 3.750–6	UN	2A	3.7261 3.7253	3.7471 3.7479	3.63880 3.63855	3.7012 3.7004	3.7471 3.7479	3.62900 3.62925	3.62900 3.62875	3.7471 3.7479	3.7471 3.7479
		3A	3.7290 3.7282	3.7500 3.7508	3.64170 3.64145	3.7066 3.7058	3.7500 3.7508	3.63440 3.63465	3.63440 3.63415	3.7500 3.7508	3.7500 3.7508
3¾–8 or 3.750–8	UN	2A	3.7302 3.7295	3.7473 3.7480	3.66610 3.66585	3.7112 3.7105	3.7473 3.7480	3.65710 3.65735	3.65710 3.65685	3.7473 3.7480	3.7473 3.7480
		3A	3.7329 3.7322	3.7500 3.7507	3.66880 3.66855	3.7162 3.7155	3.7500 3.7507	3.66210 3.66235	3.66210 3.66185	3.7500 3.7507	3.7500 3.7507
3¾–12 or 3.750–12	UN	2A	3.7352 3.7346	3.7481 3.7487	3.69400 3.69375	3.7237 3.7231	3.7481 3.7487	3.68760 3.68785	3.68760 3.68735	3.7481 3.7487	3.7481 3.7487
		3A	3.7371 3.7365	3.7500 3.7506	3.69590 3.69565	3.7272 3.7266	3.7500 3.7506	3.69110 3.69135	3.69110 3.69085	3.7500 3.7506	3.7500 3.7506
3¾–16 or 3.750–16	UN	2A	3.7378 3.7372	3.7483 3.7489	3.70770 3.70745	3.7290 3.7284	3.7483 3.7489	3.70190 3.70215	3.70190 3.70165	3.7483 3.7489	3.7483 3.7489
		3A	3.7395 3.7389	3.7500 3.7506	3.70940 3.76915	3.7322 3.7316	3.7500 3.7506	3.70510 3.70535	3.70510 3.70485	3.7500 3.7506	3.7500 3.7506
3⅞–6 or 3.875–6	UN	2A	3.8510 3.8502	3.8720 3.8728	3.76370 3.76345	3.8260 3.8252	3.8720 3.8728	3.75380 3.75405	3.75380 3.75355	3.8720 3.8728	3.8720 3.8728
		3A	3.8540 3.8532	3.8750 3.8758	3.76670 3.76645	3.8315 3.8307	3.8750 3.8758	3.75930 3.75955	3.75930 3.75905	3.8750 3.8758	3.8750 3.8758

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs — Plug for GO thread gage [a] — Major diameter, Truncated	Full	Pitch diameter	Plug for LO or NOT GO thread gage [a] — Major diameter, Truncated	Full	Pitch diameter — Plus tolerance gage	Minus tolerance gage	Basic-crest setting plugs — Major diameter — Plug for GO thread gage [a][b] — W and X tolerances	Plug for LO or NOT GO thread gage [a][c] — W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
3⅞–8 or 3.875–8	UN	2A	3.8552 / 3.8545	3.8723 / 3.8730	3.79110 / 3.79085	3.8361 / 3.8354	3.8723 / 3.8730	3.78200 / 3.78225	3.78200 / 3.78175	3.8723 / 3.8730	3.8723 / 3.8730
		3A	3.8579 / 3.8572	3.8750 / 3.8757	3.79380 / 3.79355	3.8411 / 3.8404	3.8756 / 3.8757	3.78700 / 3.78725	3.78700 / 3.78675	3.8750 / 3.8757	3.8750 / 3.8757
3⅞–12 or 3.875–12	UN	2A	3.8601 / 3.8595	3.8730 / 3.8736	3.81890 / 3.81865	3.8485 / 3.8479	3.8730 / 3.8736	3.81240 / 3.81265	3.81240 / 3.81215	3.8730 / 3.8736	3.8730 / 3.8736
		3A	3.8621 / 3.8615	3.8750 / 3.8756	3.82090 / 3.82065	3.8521 / 3.8515	3.8750 / 3.8756	3.81600 / 3.81625	3.81600 / 3.81575	3.8750 / 3.8756	3.8750 / 3.8756
3⅞–16 or 3.875–16	UN	2A	3.8627 / 3.8621	3.8732 / 3.8738	3.83260 / 3.83235	3.8538 / 3.8532	3.8732 / 3.8738	3.82670 / 3.82695	3.82670 / 3.82645	3.8732 / 3.8738	3.8732 / 3.8738
		3A	3.8645 / 3.8639	3.8750 / 3.8756	3.83440 / 3.83415	3.8571 / 3.8565	3.8750 / 3.8756	3.83000 / 3.83025	3.83000 / 3.82975	3.8750 / 3.8756	3.8750 / 3.8756
4–4 or 4.000–4	UNC	1A	3.9685 / 3.9676	3.9966 / 3.9975	3.83420 / 3.83395	3.9255 / 3.9246	3.9966 / 3.9975	3.81720 / 3.81745	3.81720 / 3.81695	3.9966 / 3.9975	3.9966 / 3.9975
		2A	3.9685 / 3.9676	3.9966 / 3.9975	3.83420 / 3.83395	3.9312 / 3.9303	3.9966 / 3.9975	3.82290 / 3.82315	3.82290 / 3.82265	3.9966 / 3.9975	3.9966 / 3.9975
		3A	3.9719 / 3.9710	4.0000 / 4.0009	3.83760 / 3.83735	3.9374 / 3.9365	4.0000 / 4.0009	3.82910 / 3.82935	3.82910 / 3.82885	4.0000 / 4.0009	4.0000 / 4.0009
4–6 or 4.000–6	UN	2A	3.9760 / 3.9752	3.9970 / 3.9978	3.88870 / 3.88845	3.9510 / 3.9502	3.9970 / 3.9978	3.87880 / 3.87905	3.87880 / 3.87855	3.9970 / 3.9978	3.9970 / 3.9978
		3A	3.9790 / 3.9782	4.0000 / 4.0008	3.89170 / 3.89145	3.9565 / 3.9557	4.0000 / 4.0008	3.88430 / 3.88455	3.88430 / 3.88405	4.0000 / 4.0008	4.0000 / 4.0008
4–8 or 4.000–8	UN	2A	3.9802 / 3.9795	3.9973 / 3.9980	3.91610 / 3.91585	3.9611 / 3.9604	3.9973 / 3.9980	3.90700 / 3.90725	3.90700 / 3.90675	3.9973 / 3.9980	3.9973 / 3.9980
		3A	3.9829 / 3.9822	4.0000 / 4.0007	3.91880 / 3.91855	3.9661 / 3.9654	4.0000 / 4.0007	3.91200 / 3.91225	3.91200 / 3.91175	4.0000 / 4.0007	4.0000 / 4.0007
4–12 or 4.000–12	UN	2A	3.9851 / 3.9845	3.9980 / 3.9986	3.94390 / 3.94365	3.9735 / 3.9729	3.9980 / 3.9986	3.93740 / 3.93765	3.93740 / 3.93715	3.9980 / 3.9986	3.9980 / 3.9986
		3A	3.9871 / 3.9865	4.0000 / 4.0006	3.94590 / 3.94565	3.9771 / 3.9765	4.0000 / 4.0006	3.94100 / 3.94125	3.94100 / 3.94075	4.0000 / 4.0006	4.0000 / 4.0006
4–16 or 4.000–16	UN	2A	3.9877 / 3.9871	3.9982 / 3.9988	3.95760 / 3.95735	3.9788 / 3.9782	3.9982 / 3.9988	3.95170 / 3.95195	3.95170 / 3.95145	3.9982 / 3.9988	3.9982 / 3.9988
		3A	3.9895 / 3.9889	4.0000 / 4.0006	3.95940 / 3.95915	3.9821 / 3.9815	4.0000 / 4.0006	3.95500 / 3.95525	3.95500 / 3.95475	4.0000 / 4.0006	4.0000 / 4.0006
4⅛–6 or 4.125–6	UN	2A	4.1010 / 4.0997	4.1220 / 4.1233	4.0137 / 4.0134	4.0759 / 4.0746	4.1220 / 4.1233	4.0037 / 4.0040	4.0037 / 4.0034	4.1220 / 4.1233	4.1220 / 4.1233
		3A	4.1040 / 4.1027	4.1250 / 4.1263	4.0167 / 4.0164	4.0814 / 4.0801	4.1250 / 4.1263	4.0092 / 4.0095	4.0092 / 4.0089	4.1250 / 4.1263	4.1250 / 4.1263
4⅛–12 or 4.125–12	UN	2A	4.1101 / 4.1092	4.1230 / 4.1239	4.0689 / 4.0686	4.0985 / 4.0976	4.1230 / 4.1239	4.0624 / 4.0627	4.0624 / 4.0621	4.1230 / 4.1239	4.1230 / 4.1239
		3A	4.1121 / 4.1112	4.1250 / 4.1259	4.0709 / 4.0706	4.1021 / 4.1012	4.1250 / 4.1259	4.0660 / 4.0663	4.0660 / 4.0657	4.1250 / 4.1259	4.1250 / 4.1259
4⅛–16 or 4.125–16	UN	2A	4.1127 / 4.1118	4.1232 / 4.1241	4.0826 / 4.0823	4.1038 / 4.1029	4.1232 / 4.1241	4.0767 / 4.0770	4.0767 / 4.0764	4.1232 / 4.1241	4.1232 / 4.1241
		3A	4.1145 / 4.1136	4.1250 / 4.1259	4.0844 / 4.0841	4.1071 / 4.1062	4.1250 / 4.1259	4.0800 / 4.0803	4.0800 / 4.0797	4.1250 / 4.1259	4.1250 / 4.1259
4¼–4 or 4.250–4	UN	2A	4.2185 / 4.2170	4.2466 / 4.2481	4.0842 / 4.0839	4.1810 / 4.1795	4.2466 / 4.2481	4.0727 / 4.0730	4.0727 / 4.0724	4.2466 / 4.2481	4.2466 / 4.2481
		3A	4.2219 / 4.2204	4.2500 / 4.2515	4.0876 / 4.0873	4.1873 / 4.1858	4.2500 / 4.2515	4.0790 / 4.0793	4.0790 / 4.0787	4.2500 / 4.2515	4.2500 / 4.2515
4¼–6 or 4.250–6	UN	2A	4.2260 / 4.2247	4.2470 / 4.2483	4.1387 / 4.1384	4.2008 / 4.1995	4.2470 / 4.2483	4.1286 / 4.1289	4.1286 / 4.1283	4.2470 / 4.2483	4.2470 / 4.2483
		3A	4.2290 / 4.2277	4.2500 / 4.2513	4.1417 / 4.1414	4.2064 / 4.2051	4.2500 / 4.2513	4.1342 / 4.1345	4.1342 / 4.1339	4.2500 / 4.2513	4.2500 / 4.2513
4¼–12 or 4.250–12	UN	2A	4.2351 / 4.2342	4.2480 / 4.2489	4.1939 / 4.1936	4.2235 / 4.2226	4.2480 / 4.2489	4.1874 / 4.1877	4.1874 / 4.1871	4.2480 / 4.2489	4.2480 / 4.2489
		3A	4.2371 / 4.2362	4.2500 / 4.2509	4.1959 / 4.1956	4.2271 / 4.2262	4.2500 / 4.2509	4.1910 / 4.1913	4.1910 / 4.1907	4.2500 / 4.2509	4.2500 / 4.2509
4¼–16 or 4.250–16	UN	2A	4.2377 / 4.2368	4.2482 / 4.2491	4.2076 / 4.2073	4.2288 / 4.2279	4.2482 / 4.2491	4.2017 / 4.2020	4.2017 / 4.2014	4.2482 / 4.2491	4.2482 / 4.2491
		3A	4.2395 / 4.2386	4.2500 / 4.2509	4.2094 / 4.2091	4.2321 / 4.2312	4.2500 / 4.2509	4.2050 / 4.2053	4.2050 / 4.2047	4.2500 / 4.2509	4.2500 / 4.2509

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4⅜–6 or 4.375–6	UN	2A	4.3510 / 4.3497	4.3720 / 4.3733	4.2637 / 4.2634	4.3258 / 4.3245	4.3720 / 4.3733	4.2536 / 4.2539	4.2536 / 4.2533	4.3720 / 4.3733	4.3720 / 4.3733
		3A	4.3540 / 4.3527	4.3750 / 4.3763	4.2667 / 4.2664	4.3313 / 4.3300	4.3750 / 4.3763	4.2591 / 4.2594	4.2591 / 4.2588	4.3750 / 4.3763	4.3750 / 4.3763
4⅜–12 or 4.375–12	UN	2A	4.3601 / 4.3592	4.3730 / 4.3739	4.3189 / 4.3186	4.3485 / 4.3476	4.3730 / 4.3739	4.3124 / 4.3127	4.3124 / 4.3121	4.3730 / 4.3739	4.3730 / 4.3739
		3A	4.3621 / 4.3612	4.3750 / 4.3759	4.3209 / 4.3206	4.3521 / 4.3512	4.3750 / 4.3759	4.3160 / 4.3163	4.3160 / 4.3157	4.3750 / 4.3759	4.3750 / 4.3759
4⅜–16 or 4.375–16	UN	2A	4.3627 / 4.3618	4.3732 / 4.3741	4.3326 / 4.3323	4.3538 / 4.3529	4.3732 / 4.3741	4.3267 / 4.3270	4.3267 / 4.3264	4.3732 / 4.3741	4.3732 / 4.3741
		3A	4.3645 / 4.3636	4.3750 / 4.3759	4.3344 / 4.3341	4.3571 / 4.3562	4.3750 / 4.3759	4.3300 / 4.3303	4.3300 / 4.3297	4.3750 / 4.3759	4.3750 / 4.3759
4½–4 or 4.500–4	UN	2A	4.4684 / 4.4669	4.4965 / 4.4980	4.3341 / 4.3338	4.4308 / 4.4293	4.4965 / 4.4980	4.3225 / 4.3228	4.3225 / 4.3222	4.4965 / 4.4980	4.4965 / 4.4980
		3A	4.4719 / 4.4704	4.5000 / 4.5015	4.3376 / 4.3373	4.4372 / 4.4357	4.5000 / 4.5015	4.3289 / 4.3292	4.3289 / 4.3286	4.5000 / 4.5015	4.5000 / 4.5015
4½–6 or 4.500–6	UN	2A	4.4759 / 4.4746	4.4969 / 4.4982	4.3886 / 4.3883	4.4506 / 4.4493	4.4969 / 4.4982	4.3784 / 4.3787	4.3784 / 4.3781	4.4969 / 4.4982	4.4969 / 4.4982
		3A	4.4790 / 4.4777	4.5000 / 4.5013	4.3917 / 4.3914	4.4562 / 4.4549	4.5000 / 4.5013	4.3840 / 4.3843	4.3840 / 4.3837	4.5000 / 4.5013	4.5000 / 4.5013
4½–12 or 4.500–12	UN	2A	4.4851 / 4.4842	4.4980 / 4.4989	4.4439 / 4.4436	4.4735 / 4.4726	4.4980 / 4.4989	4.4374 / 4.4377	4.4374 / 4.4371	4.4980 / 4.4989	4.4980 / 4.4989
		3A	4.4871 / 4.4862	4.5000 / 4.5009	4.4459 / 4.4456	4.4771 / 4.4762	4.5000 / 4.5009	4.4410 / 4.4413	4.4410 / 4.4407	4.5000 / 4.5009	4.5000 / 4.5009
4½–16 or 4.500–16	UN	2A	4.4877 / 4.4868	4.4982 / 4.4991	4.4576 / 4.4573	4.4788 / 4.4779	4.4982 / 4.4991	4.4517 / 4.4520	4.4517 / 4.4514	4.4982 / 4.4991	4.4982 / 4.4991
		3A	4.4895 / 4.4886	4.5000 / 4.5009	4.4594 / 4.4591	4.4821 / 4.4812	4.5000 / 4.5009	4.4550 / 4.4553	4.4550 / 4.4547	4.5000 / 4.5009	4.5000 / 4.5009
4⅝–6 or 4.625–6	UN	2A	4.6009 / 4.5996	4.6219 / 4.6232	4.5136 / 4.5133	4.5755 / 4.5742	4.6219 / 4.6232	4.5033 / 4.5036	4.5033 / 4.5030	4.6219 / 4.6232	4.6219 / 4.6232
		3A	4.6040 / 4.6027	4.6250 / 4.6263	4.5167 / 4.5164	4.5812 / 4.5799	4.6250 / 4.6263	4.5090 / 4.5093	4.5090 / 4.5087	4.6250 / 4.6263	4.6250 / 4.6263
4⅝–12 or 4.625–12	UN	2A	4.6101 / 4.6092	4.6230 / 4.6239	4.5689 / 4.5686	4.5983 / 4.5974	4.6230 / 4.6239	4.5622 / 4.5625	4.5622 / 4.5619	4.6230 / 4.6239	4.6230 / 4.6239
		3A	4.6121 / 4.6112	4.6250 / 4.6259	4.5709 / 4.5706	4.6020 / 4.6011	4.6250 / 4.6259	4.5659 / 4.5662	4.5659 / 4.5656	4.6250 / 4.6259	4.6250 / 4.6259
4⅝–16 or 4.625–16	UN	2A	4.6127 / 4.6118	4.6232 / 4.6241	4.5826 / 4.5823	4.6036 / 4.6027	4.6232 / 4.6241	4.5765 / 4.5768	4.5765 / 4.5762	4.6232 / 4.6241	4.6232 / 4.6241
		3A	4.6145 / 4.6136	4.6250 / 4.6259	4.5844 / 4.5841	4.6070 / 4.6061	4.6250 / 4.6259	4.5799 / 4.5802	4.5799 / 4.5796	4.6250 / 4.6259	4.6250 / 4.6259
4¾–4 or 4.750–4	UN	2A	4.7184 / 4.7169	4.7465 / 4.7480	4.5841 / 4.5838	4.6807 / 4.6792	4.7465 / 4.7480	4.5724 / 4.5727	4.5724 / 4.5721	4.7465 / 4.7480	4.7465 / 4.7480
		3A	4.7219 / 4.7204	4.7500 / 4.7515	4.5876 / 4.5873	4.6871 / 4.6856	4.7500 / 4.7515	4.5788 / 4.5791	4.5788 / 4.5785	4.7500 / 4.7515	4.7500 / 4.7515
4¾–6 or 4.750–6	UN	2A	4.7259 / 4.7246	4.7469 / 4.7482	4.6386 / 4.6383	4.7005 / 4.6992	4.7469 / 4.7482	4.6283 / 4.6286	4.6283 / 4.6280	4.7469 / 4.7482	4.7469 / 4.7482
		3A	4.7290 / 4.7277	4.7500 / 4.7513	4.6417 / 4.6414	4.7062 / 4.7049	4.7500 / 4.7513	4.6340 / 4.6343	4.6340 / 4.6337	4.7500 / 4.7513	4.7500 / 4.7513
4¾–12 or 4.750–12	UN	2A	4.7351 / 4.7342	4.7480 / 4.7489	4.6939 / 4.6936	4.7233 / 4.7224	4.7480 / 4.7489	4.6872 / 4.6875	4.6872 / 4.6869	4.7480 / 4.7489	4.7480 / 4.7489
		3A	4.7371 / 4.7362	4.7500 / 4.7509	4.6959 / 4.6956	4.7270 / 4.7261	4.7500 / 4.7509	4.6909 / 4.6912	4.6909 / 4.6906	4.7500 / 4.7509	4.7500 / 4.7509
4¾–16 or 4.750–16	UN	2A	4.7377 / 4.7368	4.7482 / 4.7491	4.7076 / 4.7073	4.7286 / 4.7277	4.7482 / 4.7491	4.7015 / 4.7018	4.7015 / 4.7012	4.7482 / 4.7491	4.7482 / 4.7491
		3A	4.7395 / 4.7386	4.7500 / 4.7509	4.7094 / 4.7091	4.7320 / 4.7311	4.7500 / 4.7509	4.7049 / 4.7052	4.7049 / 4.7046	4.7500 / 4.7509	4.7500 / 4.7509
4⅞–6 or 4.875–6	UN	2A	4.8509 / 4.8496	4.8719 / 4.8732	4.7636 / 4.7633	4.8254 / 4.8241	4.8719 / 4.8732	4.7532 / 4.7535	4.7532 / 4.7529	4.8719 / 4.8732	4.8719 / 4.8732
		3A	4.8540 / 4.8527	4.8750 / 4.8763	4.7667 / 4.7664	4.8311 / 4.8298	4.8750 / 4.8763	4.7589 / 4.7592	4.7589 / 4.7586	4.8750 / 4.8763	4.8750 / 4.8763
4⅞–12 or 4.875–12	UN	2A	4.8601 / 4.8592	4.8730 / 4.8739	4.8189 / 4.8186	4.8483 / 4.8474	4.8730 / 4.8739	4.8122 / 4.8125	4.8122 / 4.8119	4.8730 / 4.8739	4.8730 / 4.8739
		3A	4.8621 / 4.8612	4.8750 / 4.8759	4.8209 / 4.8206	4.8520 / 4.8511	4.8750 / 4.8759	4.8159 / 4.8162	4.8159 / 4.8156	4.8750 / 4.8759	4.8750 / 4.8759

See footnotes at end of table.

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TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4⅞–16 or 4.875–16	UN	2A	4.8627 4.8618	4.8732 4.8741	4.8326 4.8323	4.8536 4.8527	4.8732 4.8741	4.8265 4.8268	4.8265 4.8262	4.8732 4.8741	4.8732 4.8741
		3A	4.8645 4.8636	4.8750 4.8759	4.8344 4.8341	4.8570 4.8561	4.8750 4.8759	4.8299 4.8302	4.8299 4.8296	4.8750 4.8759	4.8750 4.8759
5–4 or 5.000–4	UN	2A	4.9683 4.9668	4.9964 4.9979	4.8340 4.8337	4.9304 4.9289	4.9964 4.9979	4.8221 4.8224	4.8221 4.8218	4.9964 4.9979	4.9964 4.9979
		3A	4.9719 4.9704	5.0000 5.0015	4.8376 4.8373	4.9370 4.9355	5.0000 5.0015	4.8287 4.8290	4.8287 4.8284	5.0000 5.0015	5.0000 5.0015
5–6 or 5.000–6	UN	2A	4.9759 4.9746	4.9969 4.9982	4.8886 4.8883	4.9503 4.9490	4.9969 4.9982	4.8781 4.8784	4.8781 4.8778	4.9969 4.9982	4.9969 4.9982
		3A	4.9790 4.9777	5.0000 5.0013	4.8917 4.8914	4.9561 4.9548	5.0000 5.0013	4.8839 4.8842	4.8839 4.8836	5.0000 5.0013	5.0000 5.0013
5–12 or 5.000–12	UN	2A	4.9851 4.9842	4.9980 4.9989	4.9439 4.9436	4.9733 4.9724	4.9980 4.9989	4.9372 4.9375	4.9372 4.9369	4.9980 4.9989	4.9980 4.9989
		3A	4.9871 4.9862	5.0000 5.0009	4.9459 4.9456	4.9770 4.9761	5.0000 5.0009	4.9409 4.9412	4.9409 4.9406	5.0000 5.0009	5.0000 5.0009
5–16 or 5.000–16	UN	2A	4.9877 4.9868	4.9982 4.9991	4.9576 4.9573	4.9786 4.9777	4.9982 4.9991	4.9515 4.9518	4.9515 4.9512	4.9982 4.9991	4.9982 4.9991
		3A	4.9895 4.9886	5.0000 5.0009	4.9594 4.9591	4.9820 4.9811	5.0000 5.0009	4.9549 4.9552	4.9549 4.9546	5.0000 5.0009	5.0000 5.0009
5⅛–12 or 5.125–12	UN	2A	5.1101 5.1092	5.1230 5.1239	5.0689 5.0686	5.0983 5.0974	5.1230 5.1239	5.0622 5.0625	5.0622 5.0619	5.1230 5.1239	5.1230 5.1239
		3A	5.1121 5.1112	5.1250 5.1259	5.0709 5.0706	5.1020 5.1011	5.1250 5.1259	5.0659 5.0662	5.0659 5.0656	5.1250 5.1259	5.1250 5.1259
5⅛–16 or 5.125–16	UN	2A	5.1127 5.1118	5.1232 5.1241	5.0826 5.0823	5.1036 5.1027	5.1232 5.1241	5.0765 5.0768	5.0765 5.0762	5.1232 5.1241	5.1232 5.1241
		3A	5.1145 5.1136	5.1250 5.1259	5.0844 5.0841	5.1070 5.1061	5.1250 5.1259	5.0799 5.0802	5.0799 5.0796	5.1250 5.1259	5.1250 5.1259
5¼–4 or 5.250–4	UN	2A	5.2183 5.2168	5.2464 5.2479	5.0840 5.0837	5.1803 5.1788	5.2464 5.2479	5.0720 5.0723	5.0720 5.0717	5.2464 5.2479	5.2464 5.2479
		3A	5.2219 5.2204	5.2500 5.2515	5.0876 5.0873	5.1869 5.1854	5.2500 5.2515	5.0786 5.0789	5.0786 5.0783	5.2500 5.2515	5.2500 5.2515
5¼–12 or 5.250–12	UN	2A	5.2351 5.2342	5.2480 5.2489	5.1939 5.1936	5.2233 5.2224	5.2480 5.2489	5.1872 5.1875	5.1872 5.1869	5.2480 5.2489	5.2480 5.2489
		3A	5.2371 5.2362	5.2500 5.2509	5.1959 5.1956	5.2270 5.2261	5.2500 5.2509	5.1909 5.1912	5.1909 5.1906	5.2500 5.2509	5.2500 5.2509
5¼–16 or 5.250–16	UN	2A	5.2377 5.2368	5.2482 5.2491	5.2076 5.2073	5.2286 5.2277	5.2482 5.2491	5.2015 5.2018	5.2015 5.2012	5.2482 5.2491	5.2482 5.2491
		3A	5.2395 5.2386	5.2500 5.2509	5.2094 5.2091	5.2320 5.2311	5.2500 5.2509	5.2049 5.2052	5.2049 5.2046	5.2500 5.2509	5.2500 5.2509
5⅜–12 or 5.375–12	UN	2A	5.3601 5.3592	5.3730 5.3739	5.3189 5.3186	5.3483 5.3474	5.3730 5.3739	5.3122 5.3125	5.3122 5.3119	5.3730 5.3739	5.3730 5.3739
		3A	5.3621 5.3612	5.3750 5.3759	5.3209 5.3206	5.3520 5.3511	5.3750 5.3759	5.3159 5.3162	5.3159 5.3156	5.3750 5.3759	5.3750 5.3759
5⅜–16 or 5.375–16	UN	2A	5.3627 5.3618	5.3732 5.3741	5.3326 5.3323	5.3536 5.3527	5.3732 5.3741	5.3265 5.3268	5.3265 5.3262	5.3732 5.3741	5.3732 5.3741
		3A	5.3645 5.3636	5.3750 5.3759	5.3344 5.3341	5.3570 5.3561	5.3750 5.3759	5.3299 5.3302	5.3299 5.3296	5.3750 5.3759	5.3750 5.3759
5½–4 or 5.500–4	UN	2A	5.4683 5.4668	5.4964 5.4979	5.3340 5.3337	5.4302 5.4287	5.4964 5.4979	5.3219 5.3222	5.3219 5.3216	5.4964 5.4979	5.4964 5.4979
		3A	5.4719 5.4704	5.5000 5.5015	5.3376 5.3373	5.4368 5.4353	5.5000 5.5015	5.3285 5.3288	5.3285 5.3282	5.5000 5.5015	5.5000 5.5009
5½–12 or 5.500–12	UN	2A	5.4851 5.4842	5.4980 5.4989	5.4439 5.4436	5.4733 5.4724	5.4980 5.4989	5.4372 5.4375	5.4372 5.4369	5.4980 5.4989	5.4980 5.4989
		3A	5.4871 5.4862	5.5000 5.5009	5.4459 5.4456	5.4770 5.4761	5.5000 5.5009	5.4409 5.4412	5.4409 5.4406	5.5000 5.5009	5.5000 5.5009
5½–16 or 5.500–16	UN	2A	5.4877 5.4868	5.4982 5.4991	5.4576 5.4573	5.4786 5.4777	5.4982 5.4991	5.4515 5.4518	5.4515 5.4512	5.4982 5.4991	5.4982 5.4991
		3A	5.4895 5.4886	5.5000 5.5009	5.4594 5.4591	5.4820 5.4811	5.5000 5.5009	5.4549 5.4552	5.4549 5.4546	5.5000 5.5009	5.5000 5.5009
5⅝–12 or 5.625–12	UN	2A	5.6100 5.6091	5.6229 5.6238	5.5688 5.5685	5.5980 5.5971	5.6229 5.6238	5.5619 5.5622	5.5619 5.5616	5.6229 5.6238	5.6229 5.6238
		3A	5.6121 5.6112	5.6250 5.6259	5.5709 5.5706	5.6018 5.6009	5.6250 5.6259	5.5657 5.5660	5.5657 5.5654	5.6250 5.6259	5.6250 5.6259

See footnotes at end of table.

Table III.13.—*Setting plug gages, Unified screw threads*—Continued

			W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO thread gage [a][b]	Plug for LO or NOT GO thread gage [a][c]
Nominal size and threads per inch	Series designation	Class	Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	in.	in.	in.	in.	in.	in.	in.	in.
5⅝–16 or 5.625–16	UN	2A	5.6126	5.6231	5.5825	5.6034	5.6231	5.5763	5.5763	5.6231	5.6231
			5.6117	5.6240	5.5822	5.6025	5.6240	5.5766	5.5760	5.6240	5.6240
		3A	5.6145	5.6250	5.5844	5.6068	5.6250	5.5797	5.5797	5.6250	5.6250
			5.6136	5.6259	5.5841	5.6059	5.6259	5.5800	5.5794	5.6259	5.6259
5¾–4 or 5.750–4	UN	2A	5.7182	5.7463	5.5839	5.6800	5.7463	5.5717	5.5717	5.7463	5.7463
			5.7167	5.7478	5.5836	5.6785	5.7478	5.5720	5.5714	5.7478	5.7478
		3A	5.7219	5.7500	5.5876	5.6867	5.7500	5.5784	5.5784	5.7500	5.7500
			5.7204	5.7515	5.5873	5.6852	5.7515	5.5787	5.5781	5.7515	5.7515
5¾–12 or 5.750–12	UN	2A	5.7350	5.7479	5.6938	5.7230	5.7479	5.6869	5.6869	5.7479	5.7479
			5.7341	5.7488	5.6935	5.7221	5.7488	5.6872	5.6866	5.7488	5.7488
		3A	5.7371	5.7500	5.6959	5.7268	5.7500	5.6907	5.6907	5.7500	5.7500
			5.7362	5.7509	5.6956	5.7259	5.7509	5.6910	5.6904	5.7509	5.7509
5¾–16 or 5.750–16	UN	2A	5.7376	5.7481	5.7075	5.7284	5.7481	5.7013	5.7013	5.7481	5.7481
			5.7367	5.7490	5.7072	5.7275	5.7490	5.7016	5.7010	5.7490	5.7490
		3A	5.7395	5.7500	5.7094	5.7318	5.7500	5.7047	5.7047	5.7500	5.7500
			5.7386	5.7509	5.7091	5.7309	5.7509	5.7050	5.7044	5.7509	5.7509
5⅞–12 or 5.875–12	UN	2A	5.8600	5.8729	5.8188	5.8480	5.8729	5.8119	5.8119	5.8729	5.8729
			5.8591	5.8738	5.8185	5.8471	5.8738	5.8122	5.8116	5.8738	5.8738
		3A	5.8621	5.8750	5.8209	5.8518	5.8750	5.8157	5.8157	5.8750	5.8750
			5.8612	5.8759	5.8206	5.8509	5.8759	5.8160	5.8154	5.8759	5.8759
5⅞–16 or 5.875–16	UN	2A	5.8626	5.8731	5.8325	5.8534	5.8731	5.8263	5.8263	5.8731	5.8731
			5.8617	5.8740	5.8322	5.8525	5.8740	5.8266	5.8260	5.8740	5.8740
		3A	5.8645	5.8750	5.8344	5.8568	5.8750	5.8297	5.8297	5.8750	5.8750
			5.8636	5.8759	5.8341	5.8559	5.8759	5.8300	5.8294	5.8759	5.8759
6–4 or 6.000–4	UN	2A	5.9682	5.9963	5.8339	5.9298	5.9963	5.8215	5.8215	5.9963	5.9963
			5.9667	5.9978	5.8336	5.9283	5.9978	5.8218	5.8212	5.9978	5.9978
		3A	5.9719	6.0000	5.8376	5.9366	6.0000	5.8283	5.8283	6.0000	6.0000
			5.9704	6.0015	5.8373	5.9351	6.0015	5.8286	5.8280	6.0015	6.0015
6–12 or 6.000–12	UN	2A	5.9850	5.9979	5.9438	5.9730	5.9979	5.9369	5.9369	5.9979	5.9979
			5.9841	5.9988	5.9435	5.9721	5.9988	5.9372	5.9366	5.9988	5.9988
		3A	5.9871	6.0000	5.9459	5.9768	6.0000	5.9407	5.9407	6.0000	6.0000
			5.9862	6.0009	5.9456	5.9759	6.0009	5.9410	5.9404	6.0009	6.0009
6–16 or 6.000–16	UN	2A	5.9876	5.9981	5.9575	5.9784	5.9981	5.9513	5.9513	5.9981	5.9981
			5.9867	5.9990	5.9572	5.9775	5.9990	5.9516	5.9510	5.9990	5.9990
		3A	5.9895	6.0000	5.9594	5.9818	6.0000	5.9547	5.9547	6.0000	6.0000
			5.9886	6.0009	5.9591	5.9809	6.0009	5.9550	5.9544	6.0009	6.0009

[a] These setting plugs are applicable to thread snap and indicating gages as well as to thread ring gages.
[b] Pitch diameter limits of W basic-crest setting plug gages are given in column 6 of this table. Pitch diameter limits of X basic-crest setting plug gages are given in column 4 of table III.12 in this supplement.
[c] Pitch diameter limits of W basic-crest setting plug gages are given in columns 9 and 10 of this table. Pitch diameter limits of X basic-crest setting plug gages are given in columns 6 and 7 of table III.12 in this supplement.

pp. 69–74, tables III.14 and III.15: These tables have not been revised to include all the sizes shown in table III.2 in this Supplement. The designations in the third column of these tables should be revised as follows:

All designations, not so shown, should be preceded by a "U."

Designations for following sizes should be "UN": 9/16–28, 5/8–28, 3/4–28, 1–28, 1⅛–20, 1⅛–28, 1¼–20, 1½–20, 1¾–16, 1¾–20, 2–16, 2–20, and 2¼–20.

Designations for following sizes should be "UNS": ½–12, 2 1/16–16, 2 3/16–16, 2 5/16–16, and 2 7/16–16.

p. 74, 1. Introduction: Add the following sentence at end of the first paragraph: "In table IV.12, p. 92 of this Supplement, are listed selected combinations of Unified special screw threads. Pitch diameter tolerances in this table are based on a length of thread engagement of 9 times the pitch. The pitch diameter limits are applicable to a length of engagement of from 5 to 15 times the pitch. (This should not be confused with the length of thread on mating parts, as it may exceed the length of engagement by a considerable amount.)"

p. 74: Designations in second column on this page should read: 1–10 UNS, 1–15 UNS, .895–26 UNS.

p. 75, 3. PREFERRED DIAMETERS AND PITCHES. Revise the first paragraph to read:

"The use, whenever possible, of the sizes of the standard thread series listed in table III.2, p. 6 of this Supplement is recommended for all applications. Whenever sizes and pitches in table III.2 are not suitable, the designer should, if possible, choose a thread from table IV.12, p. 92 of this Supplement, which lists selected combinations of Unified special screw threads. If a selection cannot be made from either table III.2 or IV.12, consideration should be given to the following paragraphs in a choice of thread."

p. 77: In the last line of the second column, change "NC and NF" to "UNC and UNF."

p. 98, 5. METHOD OF DESIGNATING: In the first paragraph change "UNS or NS" to "UNS" (line 3), "with or without" to "with" (line 7), "p. 26" to "p. 19 in this Supplement" (last line). Revise second paragraph to read:

"The symbol "UNS" is applicable to any thread, (1) having the basic Unified thread form, (2) with limits based on Unified formulations, and (3) which is not listed in table III.2, p. 6 in this Supplement. Selected combinations of UNS threads are listed in table IV.12, p. 92 of this Supplement."

Delete remainder of 5. METHOD OF DESIGNATING. (Rest of column 2 on p. 98, first column on p. 100 to 6. DIRECTIONS FOR DETERMINING LIMITS OF SIZE OF SPECIAL THREADS.)

p. 99, table IV.12: Substitute the following table for the present table:

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			[c] Minor diameter	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
10–28 or .190–28	2A	0.0010	0.1890	0.1825	0.1658	0.1625	0.0033	0.1452	2B	0.151	0.160	0.1668	0.1711	0.0043	0.1900
10–36 or .190–36	2A	.0009	.1891	.1836	.1711	.1681	.0030	.1550	2B	.160	.166	.1720	.1759	.0039	.1900
10–40 or .190–40	2A	.0009	.1891	.1840	.1729	.1700	.0029	.1584	2B	.163	.169	.1738	.1775	.0037	.1900
10–48 or .190–48	2A	.0008	.1892	.1847	.1757	.1731	.0026	.1636	2B	.167	.172	.1765	.1799	.0034	.1900
10–56 or .190–56	2A	.0007	.1893	.1852	.1777	.1752	.0025	.1674	2B	.171	.175	.1784	.1816	.0032	.1900
12–36 or .216–36	2A	.0009	.2151	.2096	.1971	.1941	.0030	.1810	2B	.186	.192	.1980	.2019	.0039	.2160
12–40 or .216–40	2A	.0009	.2151	.2100	.1989	.1960	.0029	.1844	2B	.189	.195	.1998	.2035	.0037	.2160
12–48 or .216–48	2A	.0008	.2152	.2107	.2017	.1991	.0026	.1896	2B	.193	.198	.2025	.2059	.0034	.2160
12–56 or .216–56	2A	.0007	.2153	.2112	.2037	.2012	.0025	.1934	2B	.197	.201	.2044	.2076	.0032	.2160
¼–24 or .250–24	2A	.0011	.2489	.2417	.2218	.2181	.0037	.1978	2B	.205	.215	.2229	.2277	.0048	.2500
¼–27 or .250–27	2A	.0010	.2490	.2423	.2249	.2214	.0035	.2036	2B	.210	.219	.2259	.2304	.0045	.2500
¼–36 or .250–36	2A	.0009	.2491	.2436	.2311	.2280	.0031	.2150	2B	.220	.226	.2320	.2360	.0040	.2500
¼–40 or .250–40	2A	.0009	.2491	.2440	.2329	.2300	.0029	.2184	2B	.223	.229	.2338	.2376	.0038	.2500
¼–48 or .250–48	2A	.0008	.2492	.2447	.2357	.2330	.0027	.2236	2B	.227	.232	.2365	.2401	.0036	.2500
¼–56 or .250–56	2A	.0008	.2492	.2451	.2376	.2350	.0026	.2273	2B	.231	.235	.2384	.2417	.0033	.2500
⁵⁄₁₆–27 or .3125–27	2A	.0010	.3115	.3048	.2874	.2839	.0035	.2661	2B	.272	.281	.2884	.2929	.0045	.3125
⁵⁄₁₆–36 or .3125–36	2A	.0009	.3116	.3061	.2936	.2905	.0031	.2775	2B	.282	.289	.2945	.2985	.0040	.3125
⁵⁄₁₆–40 or .3125–40	2A	.0009	.3116	.3065	.2954	.2925	.0029	.2809	2B	.285	.291	.2963	.3001	0038	.3125

See footnotes at end of table.

Nominal size and threads per inch	Class	Allowance	Major diameter Max[b]	Major diameter Min	Pitch diameter Max[b]	Pitch diameter Min	Pitch diameter Tolerance	Minor diameter[c]	Class	Minor diameter Min	Minor diameter Max	Pitch diameter Min	Pitch diameter Max	Pitch diameter Tolerance	Major diameter Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
5⁄16–48 or .3125–48	2A	.0008	.3117	.3072	.2982	.2955	.0027	.2861	2B	.290	.295	.2990	.3026	.0036	.3125
3⁄8–18 or .375–18	2A	.0013	.3737	.3650	.3376	.3333	.0043	.3055	2B	.315	.328	.3389	.3445	.0056	.3750
3⁄8–27 or .375–27	2A	.0011	.3739	.3672	.3498	.3462	.0036	.3285	2B	.335	.344	.3509	.3556	.0047	.3750
3⁄8–36 or .375–36	2A	.0010	.3740	.3685	.3560	.3528	.0032	.3399	2B	.345	.352	.3570	.3612	.0042	.3750
3⁄8–40 or .375–40	2A	.0009	.3741	.3690	.3579	.3548	.0031	.3434	2B	.348	.354	.3588	.3628	.0040	.3750
.390–27	2A	.0011	.3889	.3822	.3648	.3612	.0036	.3435	2B	.350	.359	.3659	.3706	.0047	.3900
7⁄16–18 or .4375–18	2A	.0013	.4362	.4275	.4001	.3958	.0043	.3680	2B	.377	.390	.4014	.4070	.0056	.4375
7⁄16–24 or .4375–24	2A	.0011	.4364	.4292	.4093	.4055	.0038	.3853	2B	.392	.402	.4104	.4153	.0049	.4375
7⁄16–27 or .4375–27	2A	.0011	.4364	.4297	.4123	.4087	.0036	.3910	2B	.397	.406	.4134	.4181	.0047	.4375
7⁄16–36 or .4375–36	2A	.0011	.4365	.4310	.4185	.4153	.0032	.4024	2B	.407	.414	.4195	.4237	.0042	.4375
7⁄16–40 or .4375–40	2A	.0009	.4366	.4315	.4204	.4173	.0031	.4059	2B	.410	.416	.4213	.4253	.0040	.4375
1⁄2–12 or .500–12	2A	.0016	.4984	.4870	.4443	.4389	.0054	.3962	2B	.410	.428	.4459	.4529	.0070	.5000
	3A	.0000	.5000	.4886	.4459	.4419	.0040	.3978	3B	.4100	.4223	.4459	.4511	.0052	.5000
1⁄2–14 or .500–14	2A	.0015	.4985	.4882	.4521	.4471	.0050	.4109	2B	.423	.438	.4536	.4601	.0065	.5000
1⁄2–18 or .500–18	2A	.0013	.4987	.4900	.4626	.4582	.0044	.4305	2B	.440	.453	.4639	.4697	.0058	.5000
1⁄2–24 or .500–24	2A	.0012	.4988	.4916	.4717	.4678	.0039	.4477	2B	.455	.465	.4729	.4780	.0051	.5000
1⁄2–27 or .500–27	2A	.0011	.4989	.4922	.4748	.4711	.0037	.4535	2B	.460	.469	.4759	.4807	.0048	.5000
1⁄2–36 or .500–36	2A	.0010	.4990	.4935	.4810	.4777	.0033	.4649	2B	.470	.476	.4820	.4863	.0043	.5000
1⁄2–40 or .500–40	2A	.0010	.4990	.4939	.4828	.4796	.0032	.4683	2B	.473	.479	.4838	.4879	.0041	.5000
9⁄16–14 or .5625–14	2A	.0015	.5610	.5507	.5146	.5096	.0050	.4734	2B	.485	.501	.5161	.5226	.0065	.5625
9⁄16–27 or .5625–27	2A	.0011	.5614	.5547	.5373	.5336	.0037	.5160	2B	.522	.531	.5384	.5432	.0048	.5625
9⁄16–36 or .5625–36	2A	.0010	.5615	.5560	.5435	.5402	.0033	.5274	2B	.532	.539	.5445	.5488	.0043	.5625
9⁄16–40 or .5625–40	2A	.0010	.5615	.5564	.5453	.5421	.0032	.5308	2B	.535	.541	.5463	.5504	.0041	.5625
5⁄8–14 or .625–14	2A	.0015	.6235	.6132	.5771	.5720	.0051	.5359	2B	.548	.564	.5786	.5852	.0066	.6250
5⁄8–27 or .625–27	2A	.0011	.6239	.6172	.5998	.5960	.0038	.5785	2B	.585	.594	.6009	.6059	.0050	.6250
5⁄8–36 or .625–36	2A	.0010	.6240	.6185	.6060	.6026	.0034	.5899	2B	.595	.602	.6070	.6114	.0044	.6250
5⁄8–40 or .625–40	2A	.0010	.6240	.6189	.6078	.6045	.0033	.5933	2B	.598	.604	.6088	.6131	.0043	.6250
3⁄4–14 or .750–14	2A	.0015	.7485	.7382	.7021	.6970	.0051	.6609	2B	.673	.688	.7036	.7103	.0067	.7500
3⁄4–18 or .750–18	2A	.0014	.7486	.7399	.7125	.7079	.0046	.6804	2B	.690	.703	.7139	.7199	.0060	.7500
3⁄4–24 or .750–24	2A	.0012	.7488	.7416	.7217	.7176	.0041	.6977	2B	.705	.715	.7229	.7282	.0053	.7500

See footnotes at end of table.

Nominal size and threads per inch	External a								Internal a						
	Class	Allow-ance	Major diameter		Pitch diameter			Minor diam-eter c	Class	Minor diameter		Pitch diameter			Major diameter
			Max b	Min	Max b	Min	Toler-ance			Min	Max	Min	Max	Toler-ance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	in.	in.	in.	in.	in.	in.		in.	in.	in.	in.	in.	in.
¾–27 or .750–27	2A	.0012	.7488	.7421	.7247	.7208	.0039	.7034	2B	.710	.719	.7259	.7310	.0051	.7500
¾–36 or .750–36	2A	.0010	.7490	.7435	.7310	.7275	.0035	.7149	2B	.720	.726	.7320	.7365	.0045	.7500
¾–40 or .750–40	2A	.0010	.7490	.7439	.7328	.7294	.0034	.7183	2B	.723	.729	.7338	.7382	.0044	.7500
⅞–10 or .875–10	2A	.0018	.8732	.8603	.8082	.8022	.0060	.7505	2B	.767	.788	.8100	.8178	.0078	.8750
⅞–18 or .875–18	2A	.0014	.8736	.8649	.8375	.8329	.0046	.8054	2B	.815	.828	.8389	.8449	.0060	.8750
⅞–24 or .875–24	2A	.0012	.8738	.8666	.8467	.8426	.0041	.8227	2B	.830	.840	.8479	.8532	.0053	.8750
⅞–27 or .875–27	2A	.0012	.8738	.8671	.8497	.8458	.0039	.8284	2B	.835	.844	.8509	.8560	.0051	.8750
⅞–36 or .875–36	2A	.0010	.8740	.8685	.8560	.8525	.0035	.8399	2B	.845	.852	.8570	.8615	.0045	.8750
⅞–40 or .875–40	2A	.0010	.8740	.8689	.8578	.8544	.0034	.8433	2B	.848	.854	.8588	.8632	.0044	.8750
1–10 or 1.000–10	2A	.0018	.9982	.9853	.9332	.9270	.0062	.8755	2B	.892	.913	.9350	.9430	.0080	1.0000
d 1–14 or 1.000–14	1A 2A 3A	.0017 .0017 .0000	.9983 .9983 1.0000	.9828 .9880 .9897	.9519 .9519 .9536	.9435 .9463 .9494	.0084 .0056 .0042	.9107 .9107 .9124	1B 2B 3B	.923 .923 .9230	.938 .938 .9315	.9536 .9536 .9536	.9645 .9609 .9590	.0109 .0073 .0054	1.0000 1.0000 1.0000
1–18 or 1.000–18	2A	.0014	.9986	.9899	.9625	.9578	.0047	.9304	2B	.940	.953	.9639	.9701	.0062	1.0000
1–24 or 1.000–24	2A	.0013	.9987	.9915	.9716	.9674	.0042	.9476	2B	.955	.965	.9729	.9784	.0055	1.0000
1–27 or 1.000–27	2A	.0012	.9988	.9921	.9747	.9707	.0040	.9534	2B	.960	.969	.9759	.9811	.0052	1.0000
1–36 or 1.000–36	2A	.0011	.9989	.9934	.9809	.9773	.0036	.9648	2B	.970	.976	.9820	.9867	.0047	1.0000
1–40 or 1.000–40	2A	.0010	.9990	.9939	.9828	.9793	.0035	.9683	2B	.973	.979	.9838	.9883	.0045	1.0000
1⅛–10 or 1.125–10	2A	.0018	1.1232	1.1103	1.0582	1.0520	.0062	1.0005	2B	1.017	1.038	1.0600	1.0680	.0080	1.1250
1⅛–14 or 1.125–14	2A	.0016	1.1234	1.1131	1.0770	1.0717	.0053	1.0358	2B	1.048	1.064	1.0786	1.0855	.0069	1.1250
1⅛–24 or 1.125–24	2A	.0013	1.1237	1.1165	1.0966	1.0924	.0042	1.0726	2B	1.080	1.090	1.0979	1.1034	.0055	1.1250
1¼–10 or 1.250–10	2A	.0019	1.2481	1.2352	1.1831	1.1768	.0063	1.1254	2B	1.142	1.163	1.1850	1.1932	.0082	1.2500
1¼–14 or 1.250–14	2A	.0016	1.2484	1.2381	1.2020	1.1966	.0054	1.1608	2B	1.173	1.188	1.2036	1.2106	.0070	1.2500
1¼–24 or 1.250–24	2A	.0013	1.2487	1.2415	1.2216	1.2173	.0043	1.1976	2B	1.205	1.215	1.2229	1.2285	.0056	1.2500
1⅜–10 or 1.375–10	2A	.0019	1.3731	1.3602	1.3081	1.3018	.0063	1.2504	2B	1.267	1.288	1.3100	1.3182	.0082	1.3750
1⅜–14 or 1.375–14	2A	.0016	1.3734	1.3631	1.3270	1.3216	.0054	1.2858	2B	1.298	1.314	1.3286	1.3356	.0070	1.3750
1⅜–24 or 1.375–24	2A	.0013	1.3737	1.3665	1.3466	1.3423	.0043	1.3226	2B	1.330	1.340	1.3479	1.3535	.0056	1.3750
1½–10 or 1.500–10	2A	.0019	1.4981	1.4852	1.4331	1.4267	.0064	1.3754	2B	1.392	1.413	1.4350	1.4433	.0083	1.5000
1½–14 or 1.500–14	2A	.0017	1.4983	1.4880	1.4519	1.4464	.0055	1.4107	2B	1.423	1.438	1.4536	1.4608	.0072	1.5000
1½–24 or 1.500–24	2A	.0013	1.4987	1.4915	1.4716	1.4672	.0044	1.4476	2B	1.455	1.465	1.4729	1.4787	.0058	1.5000

See footnotes at end of table.

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			[e] Minor diameter	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1⅝–10 or 1.625–10	2A	in. .0019	in. 1.6231	in. 1.6102	in. 1.5581	in. 1.5517	in. .0064	in. 1.5004	2B	in. 1.517	in. 1.538	in. 1.5600	in. 1.5683	in. .0083	in. 1.6250
1⅝–14 or 1.625–14	2A	.0017	1.6233	1.6130	1.5769	1.5714	.0055	1.5357	2B	1.548	1.564	1.5786	1.5858	.0072	1.6250
1⅝–24 or 1.625–24	2A	.0013	1.6237	1.6165	1.5966	1.5922	.0044	1.5726	2B	1.580	1.590	1.5979	1.6037	.0058	1.6250
1¾–10 or 1.750–10	2A	.0019	1.7481	1.7352	1.6831	1.6766	.0065	1.6254	2B	1.642	1.663	1.6850	1.6934	.0084	1.7500
1¾–14 or 1.750–14	2A	.0017	1.7483	1.7380	1.7019	1.6963	.0056	1.6607	2B	1.673	1.688	1.7036	1.7109	.0073	1.7500
1¾–18 or 1.750–18	2A	.0015	1.7485	1.7398	1.7124	1.7073	.0051	1.6803	2B	1.690	1.703	1.7139	1.7205	.0066	1.7500
1⅞–10 or 1.875–10	2A	.0019	1.8731	1.8602	1.8081	1.8016	.0065	1.7504	2B	1.767	1.788	1.8100	1.8184	.0084	1.8750
1⅞–14 or 1.875–14	2A	.0017	1.8733	1.8630	1.8269	1.8213	.0056	1.7857	2B	1.798	1.814	1.8286	1.8359	.0073	1.8750
1⅞–18 or 1.875–18	2A	.0015	1.8735	1.8648	1.8374	1.8323	.0051	1.8053	2B	1.815	1.828	1.8389	1.8455	.0066	1.8750
2–10 or 2.000–10	2A	.0020	1.9980	1.9851	1.9330	1.9265	.0065	1.8753	2B	1.892	1.913	1.9350	1.9435	.0085	2.0000
2–14 or 2.000–14	2A	.0017	1.9983	1.9880	1.9519	1.9462	.0057	1.9107	2B	1.923	1.938	1.9536	1.9610	.0074	2.0000
2–18 or 2.000–18	2A	.0015	1.9985	1.9898	1.9624	1.9573	.0051	1.9303	2B	1.940	1.953	1.9639	1.9706	.0067	2.0000
2¹⁄₁₆–16 or 2.0625–16	2A 3A	.0016 .0000	2.0609 2.0625	2.0515 2.0531	2.0203 2.0219	2.0149 2.0179	.0054 .0040	1.9842 1.9858	2B 3B	1.995 1.9950	2.009 2.0033	2.0219 2.0219	2.0289 2.0271	.0070 .0052	2.0625 2.0625
2³⁄₁₆–16 or 2.1875–16	2A 3A	.0016 .0000	2.1859 2.1875	2.1765 2.1781	2.1453 2.1469	2.1399 2.1428	.0054 .0041	2.1092 2.1108	2B 3B	2.120 2.1200	2.134 2.1283	2.1469 2.1469	2.1539 2.1521	.0070 .0052	2.1875 2.1875
2¼–10 or 2.250–10	2A	.0020	2.2480	2.2351	2.1830	2.1765	.0065	2.1253	2B	2.142	2.163	2.1850	2.1935	.0085	2.2500
2¼–14 or 2.250–14	2A	.0017	2.2483	2.2380	2.2019	2.1962	.0057	2.1607	2B	2.173	2.188	2.2036	2.2110	.0074	2.2500
2¼–18 or 2.250–18	2A	.0015	2.2485	2.2398	2.2124	2.2073	.0051	2.1803	2B	2.190	2.203	2.2139	2.2206	.0067	2.2500
2⁵⁄₁₆–16 or 2.3125–16	2A 3A	.0017 .0000	2.3108 2.3125	2.3014 2.3031	2.2702 2.2719	2.2647 2.2678	.0055 .0041	2.2341 2.2358	2B 3B	2.245 2.2450	2.259 2.2533	2.2719 2.2719	2.2791 2.2773	.0072 .0054	2.3125 2.3125
2⁷⁄₁₆–16 or 2.4375–16	2A 3A	.0017 .0000	2.4358 2.4375	2.4264 2.4281	2.3952 2.3969	2.3897 2.3928	.0055 .0041	2.3591 2.3608	2B 3B	2.370 2.3700	2.384 2.3783	2.3969 2.3969	2.4041 2.4023	.0072 .0054	2.4375 2.4375
2½–10 or 2.500–10	2A	.0020	2.4980	2.4851	2.4330	2.4263	.0067	2.3753	2B	2.392	2.413	2.4350	2.4437	.0087	2.5000
2½–14 or 2.500–14	2A	.0017	2.4983	2.4880	2.4519	2.4461	.0058	2.4107	2B	2.423	2.438	2.4536	2.4612	.0076	2.5000
2½–18 or 2.500–18	2A	.0016	2.4984	2.4897	2.4623	2.4570	.0053	2.4302	2B	2.440	2.453	2.4639	2.4708	.0069	2.5000
2¾–10 or 2.750–10	2A	.0020	2.7480	2.7351	2.6830	2.6763	.0067	2.6253	2B	2.642	2.663	2.6850	2.6937	.0087	2.7500
2¾–14 or 2.750–14	2A	.0017	2.7483	2.7380	2.7019	2.6961	.0058	2.6607	2B	2.673	2.688	2.7036	2.7112	.0076	2.7500
2¾–18 or 2.750–18	2A	.0016	2.7484	2.7397	2.7123	2.7070	.0053	2.6802	2B	2.690	2.703	2.7139	2.7208	.0069	2.7500
3–10 or 3.000–10	2A	.0020	2.9980	2.9851	2.9330	2.9262	.0068	2.8753	2B	2.892	2.913	2.9350	2.9439	.0089	3.0000
.3–14 or 3.000–14	2A	.0018	2.9982	2.9879	2.9518	2.9459	.0059	2.9106	2B	2.923	2.938	2.9536	2.9613	.0077	3.0000
3–18 or 3.000–18	2A	.0016	2.9984	2.9897	2.9623	2.9569	.0054	2.9302	2B	2.940	2.953	2.9639	2.9709	.0070	3.0000

See footnotes at end of table.

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allow-ance	Major diameter		Pitch diameter			Minor diam-eter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Toler-ance			Min	Max	Min	Max	Toler-ance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in*	*in.*	*in.*
3¼–10 or 3.250–10	2A	.0020	3.2480	3.2351	3.1830	3.1762	.0068	3.1253	2B	3.142	3.163	3.1850	3.1939	.0089	3.2500
3¼–14 or 3.250–14	2A	.0018	3.2482	3.2379	3.2018	3.1959	.0059	3.1606	2B	3.173	3.188	3.2036	3.2113	.0077	3.2500
3¼–18 or 3.250–18	2A	.0016	3.2484	3.2397	3.2123	3.2069	.0054	3.1802	2B	3.190	3.203	3.2139	3.2209	.0070	3.2500
3½–10 or 3.500–10	2A	.0021	3.4979	3.4850	3.4329	3.4260	.0069	3.3752	2B	3.392	3.413	3.4350	3.4440	.0090	3.5000
3½–14 or 3.500–14	2A	.0018	3.4982	3.4879	3.4518	3.4457	.0061	3.4106	2B	3.423	3.438	3.4536	3.4615	.0079	3.5000
3½–18 or 3.500–18	2A	.0017	3.4983	3.4896	3.4622	3.4567	.0055	3.4301	2B	3.440	3.453	3.4639	3.4711	.0072	3.5000
3¾–10 or 3.750–10	2A	.0021	3.7479	3.7350	3.6829	3.6760	.0069	3.6252	2B	3.642	3.663	3.6850	3.6940	.0090	3.7500
3¾–14 or 3.750–14	2A	.0018	3.7482	3.7379	3.7018	3.6957	.0061	3.6606	2B	3.673	3.688	3.7036	3.7115	.0079	3.7500
3¾–18 or 3.750–18	2A	.0017	3.7483	3.7396	3.7122	3.7067	.0055	3.6801	2B	3.690	3.703	3.7139	3.7211	.0072	3.7500
4–10 or 4.000–10	2A	.0021	3.9979	3.9850	3.9329	3.9259	.0070	3.8752	2B	3.892	3.913	3.9350	3.9441	.0091	4.0000
4–14 or 4.000–14	2A	.0018	3.9982	3.9879	3.9518	3.9456	.0062	3.9106	2B	3.923	3.938	3.9536	3.9616	.0080	4.0000
4¼–10 or 4.250–10	2A	.0021	4.2479	4.2350	4.1829	4.1759	.0070	4.1252	2B	4.142	4.163	4.1850	4.1941	.0091	4.2500
4¼–14 or 4.250–14	2A	.0018	4.2482	4.2379	4.2018	4.1956	.0062	4.1606	2B	4.173	4.188	4.2036	4.2116	.0080	4.2500
4½–10 or 4.500–10	2A	.0021	4.4979	4.4850	4.4329	4.4259	.0070	4.3752	2B	4.392	4.413	4.4350	4.4441	.0091	4.5000
4½–14 or 4.500–14	2A	.0018	4.4982	4.4879	4.4518	4.4456	.0062	4.4106	2B	4.423	4.438	4.4536	4.4616	.0080	4.5000
4¾–10 or 4.750–10	2A	.0022	4.7478	4.7349	4.6828	4.6756	.0072	4.6251	2B	4.642	4.663	4.6850	4.6944	.0094	4.7500
4¾–14 or 4.750–14	2A	.0019	4.7481	4.7378	4.7017	4.6953	.0064	4.6605	2B	4.673	4.688	4.7036	4.7119	.0083	4.7500
5–10 or 5.000–10	2A	.0022	4.9978	4.9849	4.9328	4.9256	.0072	4.8751	2B	4.892	4.913	4.9350	4.9444	.0094	5.0000
5–14 or 5.000–14	2A	.0019	4.9981	4.9878	4.9517	4.9453	.0064	4.9105	2B	4.923	4.938	4.9536	4.9619	.0083	5.0000
5¼–10 or 5.250–10	2A	.0022	5.2478	5.2349	5.1828	5.1756	.0072	5.1251	2B	5.142	5.163	5.1850	5.1944	.0094	5.2500
5¼–14 or 5.250–14	2A	.0019	5.2481	5.2378	5.2017	5.1953	.0064	5.1605	2B	5.173	5.188	5.2036	5.2119	.0083	5.2500
5½–10 or 5.500–10	2A	.0022	5.4978	5.4849	5.4328	5.4256	.0072	5.3751	2B	5.392	5.413	5.4350	5.4444	.0094	5.5000
5½–14 or 5.500–14	2A	.0019	5.4981	5.4878	5.4517	5.4453	.0064	5.4105	2B	5.423	5.438	5.4536	5.4619	.0083	5.5000
5¾–10 or 5.750–10	2A	.0022	5.7478	5.7349	5.6828	5.6754	.0074	5.6251	2B	5.642	5.663	5.6850	5.6946	.0096	5.7500
5¾–14 or 5.750–14	2A	.0020	5.7480	5.7377	5.7016	5.6951	.0065	5.6604	2B	5.673	5.688	5.7036	5.7121	.0085	5.7500
6–10 or 6.000–10	2A	.0022	5.9978	5.9849	5.9328	5.9254	.0074	5.8751	2B	5.892	5.913	5.9350	5.9446	.0096	6.0000
6–14 or 6.000–14	2A	.0020	5.9980	5.9877	5.9516	5.9451	.0065	5.9104	2B	5.923	5.938	5.9536	5.9621	.0085	6.0000

[a] Regarding combinations of thread classes, see par. 1, p. 18, Part I.
[b] For class 2A threads having an additive finish the maximum is increased to the basic size. See par. 2, p. 23, Part I and par. 4, p. 16 in this Supplement.
[c] See fig. III.1, p. 2 in this Supplement; figs. III.3 and III.4, pp. 24 and 25, Part I.
[d] The 1–14 or 1.000–14 size was formerly NF. The tolerances and allowances for this size are based on one diameter length of engagement.

p. 100, footnote 9: Substitute the following for the first sentence in the footnote:

"This section is in substantial agreement with American Standards Association publication ASA B1.10, "Unified Miniature Screw Threads," which is published by the ASME, 345 East 47th Street, New York 17, N.Y. The latest revision should be consulted when referring to this ASA document."

pp. 100–107, section V: Wherever appearing, change "National Miniature" to "Unified Miniature".

pp. 104 and 105, tables V.2 and V.3: Revise size designations in column 1 by changing "NM" to "UNM" and by specifying the size in millimeters. The designations will then read:

.30 UNM	.55 UNM	1.00 UNM
.35 UNM	.60 UNM	1.10 UNM
.40 UNM	.70 UNM	1.20 UNM
.45 UNM	.80 UNM	1.40 UNM
.50 UNM	.90 UNM	

p. 105, 5. THREAD DESIGNATIONS: Change "NM" to "UNM" in line 5; "80 NM" to ".80 UNM" (two places).

p. 107, figure V.4: Delete and insert the following:

FIGURE V.4.—*Suggested chart for projection inspection of external Unified Miniature threads.*

p. 108, (2) *Plain cylindrical plug acceptance check gages:* Revise to read:

"(2) *Plain cylindrical plug acceptance check gages.*–GO and NOT GO plain cylindrical plug acceptance check gages are required to check the minor diameter limits of thread ring gages of the smaller sizes, after the gage has been properly set to the thread setting plug gage. Standard measuring equipment is usually employed in lieu of plain cylindrical plug gages for minor diameters larger than ⅜ in."

p. 108, 3. LIMIT GAGES: Revise to read:

"3. LIMIT GAGES.–Limit gages are of two categories, namely (1) maximum-material-limit gages, designated "GO" gages and (2) minimum-material-limit gages, designated low limit, "LO", gages for functional diameter of external threads and high limit, "HI", gages for internal threads.[12a] Single element gages for class 3A external threads continue to be designated "NOT GO"."

p. 109, 2. REMOVAL OF SHARP END THREADS: Revise third sentence, starting in line 8, to read:

"On thread ring gages of ½ in. in nominal size or smaller, or of 20 threads per inch and finer, and on all thread plug gages and setting plug gages of 28 threads per inch and finer, a 60° chamfer from the axis of the gage is permitted in lieu of removal of the partial thread."

p. 109, 3. CHIP GROOVES IN "GO" THREAD PLUG GAGES: Revise next to last sentence in col. 2 to read:

"The widths recommended for chip grooves are as follows:

Nominal diameter	Chip groove width	
	Max	Min
in.	*in.*	*in.*
No. 8 (.164) and smaller	No chip groove	
Over No. 8 (.164) to No. 12 (.216), inclusive	0.036	0.026
Over No. 12 (.216) to 3/8(.375), inclusive	.052	.042
Over 3/8(.375) to 1/2(.500), inclusive	.067	.057
Over 1/2(.500) to 1(1.000), inclusive	.083	.073
Over 1(1.000) to 1 3/4(1.750), inclusive	.130	.120
Over 1 3/4(1.750)	.193	.183"

p. 110, figure VI.I: In upper right hand portion, change "NOT GO PLUG GAGE" to "HI PLUG GAGE". In lower right hand portion, change "NOT GO RING GAGE" to "LO RING GAGE".

p. 112, figures VI.2 and VI.3: Change "NOT GO" to "LO".

p. 113, table VI.1: Change column headings as follows:

Column numbers	Heading now reads:	Heading should read:
6, 7, and 8	Not go	LO, classes 1A and 2A
		NOT GO, class 3A
14, 15, and 16	Not go	HI

p. 113, table VI.1: Add the following designation in col. 11: "8UN–2A."

p. 114, table VI.2: Change column headings as follows:

Column numbers	Heading now reads:	Heading should read:
4, 5, and 6	Plug for Go	Plug for GO thread gage
7, 8, 9, and 10	Plug for Not go	Plug for LO or NOT GO thread gage
11 and 12	Plug for Go	Plug for GO thread gage
13, 14, and 15	Plug for Not go	Plug for LO or NOT GO thread gage

p. 116, (d) MARKING OF GAGES (*to* 4. GAGE TOLERANCES AND WEAR ALLOWANCES): Revise to read:

"(d) MARKING OF GAGES

"Each gage shall be plainly and permanently marked with the minimum marking essential for positive identification. In the cases of thread plug and thread setting plug gages it may be desirable to identify both, the gaging element and the handle. Recommended marking practices are as follows: (The nominal size is to be specified in accordance with paragraph 1, Basic method of designating, on p. 17 of this Supplement.)

"1. THREAD PLUG GAGES—The GO thread plug gage members are common to all classes of threads, both standard and special, and are to be identified as shown in the following example:

┌─Nominal size
│ ┌─Threads per inch
↓ ↓
.250–20UNC GO PD .2175

The HI thread plug gage members are to be identified as follows:

.250–20UNC–2B HI PD .2223

"2. PLAIN PLUG GAGES FOR MINOR DIAMETER— The GO plain plug gage members for Unified and American National threads are common to the Unified and American National classes of threads, respectively, and are to be identified by GO and the minor diameters as follows:

GO .1960

The NOT GO plain plug gage members are to be identified by NOT GO and the minor diameter as follows:

NOT GO .2067

"3. THREAD RING OR SNAP GAGES AND SETTING PLUG GAGES THEREFOR—The GO thread ring gages or snap gages and applicable setting plug gage members are to be identified as follows:

Class 1: .250–20NC–1 GO PD .2160
Classes 1A, 2A: .250–20UNC–1A, 2A GO PD .21
Classes 2, 3, 3A: .250–20UNC GO PD .2175

Gages for classes 2, 3, and 3A are basic.
The LO thread ring gages or snap gages and applicable setting plug gage members are to be identified as follows:

.250–20UNC–2A LO PD .2127

"4. PLAIN RING GAGES FOR MAJOR DIAMETER— The GO plain ring gage members are to be identified by GO and the major diameter as follows:

GO .1960

The NOT GO plain ring gage members are to be identified by NOT GO and the major diameter as follows:

NOT GO .2408

"5. PLAIN PLUG ACCEPTANCE CHECK GAGES— The plain plug acceptance check gages for GO thread ring gages are to be identified as follows:

GO ACCEPT CHK FOR GO THD RING MINOR DIA____
NG ACCEPT CHK FOR GO THD RING MINOR DIA____

The plain plug acceptance check gages for LO thread ring gages are to be identified as follows:

GO ACCEPT CHK FOR LO THD RING MINOR DIA____
NG ACCEPT CHK FOR LO THD RING MINOR DIA____"

p. 117, 1. STANDARD TOLERANCE CLASSES: Revise to read:

"1. STANDARD TOLERANCE CLASSES.–Standard tolerances for thread plug and ring gages and thread setting plugs are of two classes:

(1) W tolerances, shown in table VI.6, Part I, which represent the highest commercial grade of accuracy or workmanship and which are required especially for truncated setting plugs and

(2) X tolerances, shown in table VI.7, Part I, which are larger than W tolerances and are an economical compromise among such factors as gage cost, amount of product tolerance consumed by gage tolerances, and possible observational errors in the measurement of gages with generally available measuring equipment.[18]"

p. 117, (b) *Tolerances on lead:* Revise to read:

"(b) *Tolerances on lead.*–Tolerances on lead (pitch and helix) are specified as an allowable variation between any two threads not farther apart than the length of the standard gage, shown in CS8, Gage Blanks (see footnote 12, p. 108, Part I), except that in the case of setting plugs, the length shall be that of the thread in the mating ring gage or 9 pitches, whichever is smaller.

"The tolerance on lead establishes the width of a zone, measured parallel to the axis of the thread, within which the actual helical path must lie for the entire length of the thread.

"All thread gage members will be inspected for total lead deviation (cumulative effect of progressive and erratic deviations). Measurements will be taken from a fixed reference point located at the start of the first full thread to a sufficient number of positions along the entire helix to detect all types of lead deviations which may be present. The amount that these positions deviate from their basic (theoretical) positions will be recorded with due respect to sign. The greatest deviation in each direction (+ and −) will be selected and the sum of their values, *disregarding sign*, shall not exceed the specified tolerance on lead value. The greatest lead deviation is the maximum deviation from nominal lead only when the lead of every portion of the screw thread is either long or short. When the lead of some portions of a thread is long and that of others is short the maximum deviation in lead is the sum of the maximum positive and maximum negative deviations without regard to sign. Since the lead tolerance may apply to the sum of a positive and a negative lead deviation the specification of lead tolerance as a ± value may be very confusing. Therefore it is recommended that the ± sign be removed from all lead tolerances.[19a]

"On truncated setting plugs, the sign of any lead deviation present shall be the same on the full-form portion and the truncated portion, and such deviation shall be uniform within 0.0001 in. over any portion equivalent to the length of the thread ring gage."

p. 118, (d) *Tolerances not cumulative:* Revise to read:

"(d) *Interpretation of tolerances.*—Tolerances on lead, flank angle, and pitch diameter are deviations which may be taken independently for each of these elements and may be taken to the full extent allowed by the respective tabulated tolerances. The tabulated tolerance on any one element must not be exceeded even though deviations in the other two elements are smaller than the respective tabulated tolerances."

p. 118, 1. Acceptability of threads: Revise to read:

"1. DIMENSIONAL ACCEPTABILITY OF THREADS. —General practice as to the dimensional acceptability of threads shall be based on the interpretations of pitch diameter limits of size in paragraph (c), p. 16 in this Supplement and the following specifications of gages and gaging practices:

"(a) *At maximum-material limits* [19b]—For referee purposes, the dimensional acceptability of threads at the maximum-material limits shall be based on gaging with "go" thread plug and ring gages conforming as closely as practicable to the limits of size of the thread and to the thread form and length specified for such gages. (See par. 3(a), *Maximum-metal or "go" gages,* p. 108, Part I.)

"(b) *At minimum-material limits* [19b]—Unless otherwise specified on the drawing or procurement document, dimensional acceptability at the minimum-material pitch-diameter limits shall be based on the following accepted practices:

"(1) *Functional (virtual) diameter gaging practice.*—Functional (virtual) diameter gaging practice, involving the use of thread plug gages and thread ring gages, conforming as closely as practicable to the limits of size of the thread and to the thread form and lengths specified in section VI for such gages, is specified for the minimum-material limits of classes 1A and 2A external threads, and classes 1B, 2B, and 3B internal threads.

"(2) *Single element gaging practice.*—Single element gaging practice, involving the use of thread snap gages or indicating type gages having thread form in accordance with section VI, or its equivalent, engaging the thread over a length of two pitches, is specified for the minimum-material limits of class 3A external threads."

p. 118, (a) "Go" and "not go" thread gages: Revise to read:

"(a) *GO, HI, and LO thread gages.*—It is recommended that W tolerances be applied to

"[19a] It has been customary in the past to specify tolerances on lead as plus or minus (±) values. It should be noted that the omission of the plus and minus does not change the total tolerance."

"[19b] External and internal threads larger than 6 in. nominal diameter present additional problems for technical and economical reasons. It is recommended that acceptance of these be alternatively based on measurement of the thread elements. A clear understanding of requirements and method of gaging should be reached between supplier and consumer."

GO, HI, and LO inspection and working thread gages for class 4. X tolerances are recommended as applicable to all inspection and working thread gages for classes 1, 1A, 1AR, 1B, 2, 2A, 2B, 3, 3A, and 3B."

p. 119: Add the following sentence before "After" in fourth line from bottom of column one:

"Care should be taken to assure that there is no lateral displacement of the sectors comprising the ring gage that would produce a lead deviation beyond the prescribed tolerance zone."

p. 117, table VI.6: Delete the following from footnote 1:

"omitting one full thread at each end of the gage."

p. 118, table VI.7: Delete the following from footnote 1:

"omitting one full thread at each end of the gage."

Delete the following footnote:

"NOTE.—When a wear allowance is wanted on "go" gages, it is recommended that the X pitch diameter tolerance be divided, one-half for wear and one-half for tolerance."

p. 119, table VI.8: Delete this table.

p. 127, table 1.1: In col. 9 for 6, 5, 4½ tpi revise values to read .07217, .08660, and .09623.

p. 144, table 1.13: For 2⁷⁄₁₆ size, change external thread max class 2 pitch diameter from 3.3969 to 2.3969.

pp. 186, 193; appendix 3: Whenever appearing, change "National Miniature" to "Unified Miniature".

p. 188, table 3.1: For 1⅝ in. thread size, 8 threads per inch, change values in columns 8 and 11 from 1.498 to 1.503, change value in column 9 from 1.494 to 1.496.

p. 195, table 4.1: For 30 threads per inch, change value in col. 5 from .01924 to .01925; for 16 threads per inch, change value in col. 4 from .054129 to .054127.

p. 195: Revise 12th line from bottom of second column by adding "permanent" before "deformation".

p. 196, table 4.2: In col. 1, change "0.01924" to "0.01925".

p. 197: Add the following at the end of section 5:

"When the value of the term

$$\left(\frac{w \tan^2 \lambda' \cos \alpha \cot \alpha}{2}\right)$$

exceeds 0.00015 in., the following pitch diameter formula should be used:

$$E = M_w - (C + c)$$

Tabular values for $(C+c)_1$ for a 1-in. axial pitch screw for 60° threads are given in table 4.3 in this Supplement which values should be divided by the threads per inch for a given case. (See Appendix 13, Part III, for further details.)"

Add the following table:

TABLE 4.3—*Best wire diameters and constants for large lead angles, 1-in. axial pitch 60° threads*

Lead angle, λ	1-start threads		2-start threads		Lead angle, λ	2-start threads		3-start threads	
	w_1	$(C+c)_1$	w_1	$(C+c)_1$		w_1	$(C+c)_1$	w_1	$(C+c)_1$
1	2	3	4	5	1	4	5	6	7
deg	*in.*	*in.*	*in.*	*in.*	*deg*	*in.*	*in.*	*in.*	*in.*
5.0	0.57493	0.86181	0.57477	0.86145	10.0	0.56767	0.84918	0.56728	0.84830
5.1	.57483	.86165	.57467	.86127	10.1	.56749	.84887	.56709	.84797
5.2	.57474	.86149	.57456	.86109	10.2	.56730	.84856	.56689	.84763
5.3	.57465	.86133	.57446	.86091	10.3	.56711	.84824	.56669	.84729
5.4	.57456	.86117	.57435	.86072	10.4	.56693	.84793	.56649	.84695
5.5	.57446	.86100	.57425	.86053	10.5	.56674	.84761	.56629	.84660
5.6	.57436	.86083	.57414	.86034	10.6	.56656	.84729	.56609	.84625
5.7	.57426	.86066	.57403	.86015	10.7	.56637	.84697	.56589	.84589
5.8	.57416	.86049	.57392	.85995	10.8	.56617	.84664	.56568	.84553
5.9	.57406	.86032	.57381	.85976	10.9	.56598	.84631	.56547	.84517
6.0	.57395	.86014	.57369	.85956	11.0	.56578	.84598	.56526	.84481
6.1	.57385	.85996	.57358	.85936	11.1	.56558	.84564	.56506	.84445
6.2	.57374	.85978	.57346	.85915	11.2	.56538	.84530	.56485	.84409
6.3	.57363	.85960	.57333	.85893	11.3	.56518	.84497	.56463	.84372
6.4	.57352	.85942	.57320	.85871	11.4	.56498	.84463	.56441	.84335
6.5	.57341	.85923	.57308	.85850	11.5	.56478	.84429	.56420	.84298
6.6	.57330	.85904	.57295	.85828	11.6	.56457	.84394	.56398	.84260
6.7	.57318	.85885	.57282	.85805	11.7	.56437	.84360	.56375	.84221
6.8	.57307	.85866	.57269	.85782	11.8	.56416	.84325	.56353	.84183
6.9	.57295	.85847	.57256	.85760	11.9	.56396	.84290	.56331	.84145
7.0	.57284	.85828	.57242	.85737	12.0	.56375	.84255	.56308	.84106
7.1	.57272	.85808	.57228	.85713	12.1	.56353	.84219	.56285	.84067
7.2	.57260	.85788	.57215	.85689	12.2	.56332	.84183	.56263	.84028
7.3	.57248	.85768	.57201	.85664	12.3	.56311	.84147	.56240	.83989
7.4	.57236	.85747	.57187	.85640	12.4	.56289	.84111	.56217	.83949
7.5	.57223	.85727	.57173	.85616	12.5	.56267	.84075	.56193	.83908
7.6	.57211	.85706	.57159	.85591	12.6	.56245	.84038	.56170	.83868
7.7	.57198	.85685	.57144	.85566	12.7	.56223	.84001	.56147	.83828
7.8	.57185	.85664	.57129	.85540	12.8	.56201	.83964	.56123	.83787
7.9	.57171	.85642	.57114	.85515	12.9	.56179	.83927	.56099	.83746
8.0	.57158	.85620	.57100	.85490	13.0	.56157	.83890	.56075	.83705
8.1	.57144	.85598	.57085	.85464	13.1	.56135	.83853	.56051	.83664
8.2	.57131	.85576	.57070	.85438	13.2	.56113	.83815	.56027	.83622
8.3	.57117	.85554	.57054	.85411	13.3	.56090	.83777	.56002	.83579
8.4	.57104	.85533	.57038	.85383	13.4	.56067	.83739	.55977	.83537
8.5	.57090	.85511	.57022	.85356	13.5	.56044	.83701	.55952	.83495
8.6	.57076	.85489	.57007	.85329	13.6	.56021	.83662	.55927	.83452
8.7	.57063	.85466	.56991	.85301	13.7	.55997	.83623	55902	.83409
8.8	.57049	.85444	.56974	.85273	13.8	.55974	.83584	.55877	.83366
8.9	.57035	.85421	.56958	.85245	13.9	.55950	.83545	.55852	.83323
9.0	.57021	.85398	.56941	.85217	14.0	.55926	.83506	.55827	.83280
9.1	.57007	.85375	.56924	.85188	14.1	.55903	.83467	.55802	.83237
9.2	.56993	.85352	.56907	.85159	14.2	.55880	.83428	.55776	.83193
9.3	.56978	.85329	.56890	85130	14.3	.55856	.83388	.55750	.83149
9.4	.56964	.85305	.56873	.85100	14.4	.55831	.83347	.55724	.83105
9.5	.56949	.85282	.56856	.85070	14.5	.55807	.83307	.55698	.83060
9.6	.56935	.85258	.56838	.85040	14.6	.55782	.83266	.55671	.83014
9.7	.56920	.85235	.56820	.85010	14.7	.55757	.83225	.55645	.82969
9.8	.56905	.85211	.56803	.84980	14.8	.55733	.83185	.55618	.82923
9.9	.56890	.85187	.56785	84949	14.9	.55709	.83145	.55590	.82877
10.0	.56875	.85163	.56767	.84918	15.0	.55684	.83104	.55563	.82831

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Lead angle, λ	3-start threads		4-start threads		Lead angle, λ	3-start threads		4-start threads	
	w_1	$(C+c)_1$	w_1	$(C+c)_1$		w_1	$(C+c)_1$	w_1	$(C+c)_1$
1	6	7	8	9	1	6	7	8	9
deg	in.	in.	in.	in.	deg	in.	in.	in.	in.
13.0	.56075	.83705	.56033	.83609	18.0	.54682	.81344	.54579	.81109
13.1	.56051	.83664	.56008	.83566	18.1	.54651	.81291	.54546	.81053
13.2	.56027	.83622	.55982	.83522	18.2	.54619	.81238	.54513	.80997
13.3	.56002	.83579	.55956	.83477	18.3	.54588	.81185	.54480	.80940
13.4	.55977	.83537	.55931	.83433	18.4	.54556	.81132	.54447	.80883
13.5	.55952	.83495	.55905	.83388	18.5	.54524	.81078	.54414	.80826
13.6	.55927	.83452	.55879	.83342	18.6	.54492	.81024	.54380	.80768
13.7	.55902	.83409	.55853	.83297	18.7	.54459	.80970	.54345	.80710
13.8	.55877	.83366	.55827	.83252	18.8	.54427	.80916	.54311	.80652
13.9	.55852	.83323	.55800	.83207	18.9	.54394	.80861	.54277	.80594
14.0	.55827	.83280	.55774	.83161	19.0	.54361	.80805	.54242	.80535
14.1	.55802	.83237	.55747	.83115	19.1	.54328	.80749	.54208	.80477
14.2	.55776	.83193	.55720	.83068	19.2	.54295	.80694	.54173	.80418
14.3	.55750	.83149	.55693	.83022	19.3	.54261	.80638	.54138	.80358
14.4	.55724	.83105	.55666	.82975	19.4	.54227	.80582	.54103	.80298
14.5	.55698	.83060	.55639	.82928	19.5	.54193	.80526	.54067	.80238
14.6	.55671	.83014	.55611	.82880	19.6	.54160	.80470	.54032	.80178
14.7	.55645	.82969	.55583	.82831	19.7	.54126	.80414	.53997	.80118
14.8	.55618	.82923	.55555	.82783	19.8	.54092	.80358	.53961	.80057
14.9	.55590	.82877	.55527	.82735	19.9	.54058	.80301	.53925	.79997
15.0	.55563	.82831	.55499	.82687	20.0	.54025	.80245	.53889	.79936
15.1	.55536	.82784	.55471	.82638	20.1	------	------	.53852	.79874
15.2	.55509	.82737	.55442	.82589	20.2	------	------	.53816	.79812
15.3	.55481	.82690	.55414	.82540	20.3	------	------	.53779	.79750
15.4	.55453	.82643	.55385	.82490	20.4	------	------	.53743	.79689
15.5	.55425	.82596	.55356	.82440	20.5	------	------	.53706	.79627
15.6	.55397	.82549	.55327	.82390	20.6	------	------	.53669	.79564
15.7	.55369	.82501	.55297	.82339	20.7	------	------	.53632	.79502
15.8	.55340	.82453	.55268	.82289	20.8	------	------	.53595	.79440
15.9	.55312	.82405	.55239	.82238	20.9	------	------	.53558	.79377
16.0	.55283	.82356	.55209	.82187	21.0	------	------	.53521	.79314
16.1	.55254	.82307	.55179	.82135	21.1	------	------	.53484	.79251
16.2	.55225	.82258	.55148	.82083	21.2	------	------	.53446	.79187
16.3	.55196	.82209	.55117	.82031	21.3	------	------	.53408	.79123
16.4	.55167	.82160	.55087	.81979	21.4	------	------	.53370	.79059
16.5	.55138	.82110	.55057	.81926	21.5	------	------	.53332	.78994
16.6	.55109	.82061	.55026	.81873	21.6	------	------	.53294	.78930
16.7	.55079	.82011	.54995	.81821	21.7	------	------	.53255	.78865
16.8	.55050	.81962	.54964	.81768	21.8	------	------	.53217	.78801
16.9	.55020	.81912	.54933	.81715	21.9	------	------	.53178	.78736
17.0	.54990	.81862	.54902	.81661	22.0	------	------	.53139	.78670
17.1	.54960	.81811	.54870	.81607	22.1	------	------	.53100	.78604
17.2	.54929	.81759	.54839	.81552	22.2	------	------	.53061	.78539
17.3	.54898	.81707	.54807	.81497	22.3	------	------	.53022	.78473
17.4	.54867	.81655	.54774	.81442	22.4	------	------	.52983	.78406
17.5	.54837	.81604	.54742	.81387	22.5	------	------	.52943	.78339
17.6	.54806	.81552	.54710	.81333	22.6	------	------	.52903	.78272
17.7	.54775	.81500	.54677	.81277	22.7	------	------	.52863	.78205
17.8	.54744	.81448	.54645	.81222	22.8	------	------	.52823	.78138
17.9	.54713	.81396	.54612	.81166	22.9	------	------	.52783	.78071
18.0	.54682	.81344	.54579	.81109	23.0	------	------	.52743	.78004

NOTE.—This table courtesy of the Van Keuren Co.

p. 201: Revise last two lines of second column to read: "stress area and thread shear area are shown below. These areas are indicated in figure 5.1."

p. 202: Add the following at the top of page 202: [24]

"Tensile stress area.—The tensile stress area is the assumed area of an external threaded part that is used for the purpose of computing the tensile strength.

Direct tensile stress.—When parts are subjected only to a direct tensile stress the assumed area applicable to steel parts *up to 180,000 psi* used in calculating the ultimate strength is computed from the following formula:

$$A_s = 3.1416 \left(\frac{E}{2} - \frac{3H}{16} \right)^2$$

or

$$A_s = 0.7854 (D - 0.9743/n)^2,$$

where

E = basic pitch diameter
D = basic major diameter
n = threads per inch

for $3H/16$, see table III.1, p. 4 of this Supplement.

Tabulated stress areas are listed in the tables on pp. 7-14 of this Supplement and pp. 128–132 of Part I.

[24] Column 1 of p. 202 of Part I and the material added to p. 202 by this Supplement, supersede paragraphs 22 and 23 on p. 5 of Part I.

Combined tensile stress.—When parts are subject to a direct tensile stress plus a torsional stress due to tightening the nut or bolt head, it is necessary to consider the combined shear and tensile stresses when calculating the strength of the externally threaded part. It is recommended that the combined stresses be computed on the basis of the section at the minimum minor diameter of the external thread. The direct tensile stress is given by the formulas:

$$S_t = F/A$$

$$A_r = 0.7854[(K_s \text{ min})^2 - d^2]$$

where
A_r = area in sq in. at the minimum minor diameter.
F = axial load on externally threaded parts in lb.

The direct torsional stress is given by the formulas:

$$S_s = T_1/Z_p$$

$$Z_p = 0.1963 \frac{[(K_s \text{ min})^4 - d^4]}{K_s \text{ min}}$$

where
T_1 = wrench torque transmitted through the threaded section, approximately equal to half of the total wrench torque in lb-in.
Z_p = polar section modulus in in.^{3}
K_s min = minimum minor diameter of external thread in in.
d = inside diameter of externally threaded part in in.; if part is solid, d = zero.

The combined shear stress in psi is given by the formula:

$$S_s' = \sqrt{\left(\frac{S_t}{2}\right)^2 + (S_s)^2}.$$

The combined tensile stress in psi is given by the formula:

$$S_t' = S_s' + S_t/2.$$

Having once determined the combined stresses due to a given set of conditions for wrench torque and coefficient of friction, other combined stresses will be directly proportional to the wrench torque.

Thread shear area.—The diameter corresponding to the effective thread shear area will vary with the relative unit tensile strengths of the materials of the internal and external threads.

When the external and internal threads are manufactured from materials of equal unit tensile strength, failure will usually take place simultaneously in both threads at or near a diameter equal to the basic pitch diameter. The shear area (AS) for external and internal threads made of such materials can be computed from the following formula:

$$AS = 3.1416E \frac{L_e}{2}$$

where

E = basic pitch diameter
L_e = length of engagement at basic pitch diameter.

When the unit tensile strength of the external thread material greatly exceeds that of the internal thread material, as in the case of a threaded hole in a cast aluminum block mated with a 100,000 psi ultimate strength material bolt, the shear area of the internal thread (AS_n) can be computed from the following formulas:

(1) For simplified calculations that will provide shear areas within about 5 percent of those given by the precise formula shown below, the shear area of the internal thread may be computed as follows:

$$AS_n = 3.1416E \frac{3L_e}{4}$$

where L_e = length of engagement at the basic pitch diameter.

(2) The precise equation for shear area of the internal thread at a diameter equal to the minimum major diameter of the external thread is as follows:

$$AS_n = 3.1416nL_eD_s \text{ min}$$
$$\left[\frac{1}{2n} + 0.57735(D_s \text{ min} - E_n \text{ max})\right]$$

where
n = number of threads per inch
D_s min = minimum major diameter of external thread
E_n max = maximum pitch diameter of internal thread
L_e = length of engagement at minimum major diameter of external thread. (Use L_e at basic pitch diameter for simplicity; this is conservative.)

When the unit tensile strength of the internal thread material greatly exceeds that of the external thread material, the shear area of the external thread (AS_s) can be computed from the following formulas:

(1) For simplified calculations for diameters 0.250 in. and larger, that will provide shear areas within about 5 percent of those given by the precise formula shown below, the shear area of the external thread may be computed as follows:

$$AS_s = 3.1416E \frac{5L_e}{8}$$

where L_e = length of engagement at the basic pitch diameter.

(2) The precise equation for shear area of the external thread at a diameter equal to the maximum minor diameter of the internal thread is as follows:

$$AS_s = 3.1416nL_eK_n \text{ max}$$
$$\left[\frac{1}{2n} + 0.57735(E_s \text{ min} - K_n \text{ max})\right]$$

where

K_n max=maximum minor diameter of internal thread.

E_s min=minimum pitch diameter of external thread.

p. 202: Substitute the following for the first 5 lines of the second paragraph:

"2. LENGTH OF THREAD ENGAGEMENT.—The length of engagement of a threaded unit that will develop maximum strength of an assembly threaded with external and internal threads manufactured from materials of near or equal unit tensile strength may be computed from the following formula, which incorporates the factor "half" relation of unit shearing strength to unit tensile strength:

$$L_e = 4A_s/3.1416E$$

where

$$A_s = 3.1416 \left(\frac{E}{2} - \frac{3H}{16}\right)^2.$$

When the unit tensile strength of the external thread materially exceeds that of the internal thread, the required length of engagement to develop maximum strength may be computed from the following formula, which is also based on the shear area being twice the tensile stress area:

$$L_e = \frac{2A_s}{3.1416nD_s \min\left[\frac{1}{2n} + 0.57735(D_s \min - E_n \max)\right]}.$$

Likewise, when the unit tensile strength of the internal thread materially exceeds that of the external thread, the following formula should be used:"

p. 202: Substitute the following for the numerator in the formula on this page:

"$2A_s$".

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PARTS I, II, & III

PART II CHANGES

The following changes should be made in Part II:

p. 7, Substitute the following for lines 5, 6, and 7 of col. 2:

"The major and minor diameters vary with the pitch diameter, as the American Standard pipe thread form is maintained within the truncation tolerances shown in table VII.1, p. 4, Part II."

p. 7, table VII.4: Change min minor dia for $\frac{1}{8}$ in. size from 0.342 to 0.340, for $\frac{1}{4}$ in. size from 0.440 to 0.442.

p. 19, col. 1, line 11: Delete "minimum."

p. 19, col. 2, par. 1: Revise to read:

"1. MANUFACTURING TOLERANCE ON PRODUCT.—The maximum allowable variation in the Dryseal Standard (NPTF) commercial product is 1 turn large or 1 turn small from the gaging notch on the plug and the gaging face of the ring when gages are screwed up firmly by hand on or in the product. For other types of Dryseal threads smaller tolerances are specified as indicated in tables VIII.14, VIII.20, and VIII.21. Proper allowance shall be made for any variation of the gage from basic dimensions."

p. 19, table VIII.1: After "thread" in column 5 insert reference to footnote "b." Insert footnote "b" to read:

"b Length of effective thread is L_2, L_2 Short, L_1+L_3, or L_1 Short+L_3, as the case may be."

Also, in column 5 delete ".0040," leaving the reference to footnote "a."

p. 20, table VIII.2: Revise the minimum heights of thread in column 4 to read:
0.02341
.03772
.05150
.06226
.09188

p. 21, table VIII.3: Revise body of table to read:

TABLE VIII.3.—*Recommended limitation of assembly among the various types of standard Dryseal threads* [a,g]

(NOTE: This revision does not change the table technically.)

External Dryseal thread:			For assembly with internal Dryseal thread:		
Type	Table	Description	Type	Table	Description
1	2	3	4	5	6
1	VIII.4	NPTF (tapered), ext. thd.	1	VIII. 4	NPTF (tapered), int. thd.
			2 [b,d]	VIII. 6	PTF-SAE SHORT (tapered), int. thd.
			3 [e]	VIII. 7	NPSF (straight), int. thd.
			4 [e,f]	VIII. 8	NPSI (straight), int. thd.
2 [b,c]	VIII.5	PTF-SAE SHORT (tapered), ext. thd.	4	VIII. 8	NPSI (straight), int. thd.
			1	VIII. 4	NPTF (tapered), int. thd.

Add the following footnote to Table VIII. 3:

"g See table 7.9, p. 109, Part II, for limitation of assembly with other series Dryseal threads."

p. 21: Revise first paragraph in column 2 to read:

"Dimensional data for these threads are given in table VIII.4, Part II. Limitation of assembly among the various types of Dryseal standard and SAE SHORT threads shown in this section is given in table VIII.3 in this Supplement."

p. 22, table VIII.4: In footnote "b" change "not exceeding one pitch (thread) length." to read "not exceeding one and one-half pitches (threads) length."

p. 22, table VIII.4: Add footnote reference "d" to columns 3, 4, 7–8, and add footnote "d" as follows:

"d $E_0 = D - (0.05D + 1.1)p$
$E_1 = E_0 + 0.0625L_1$
$L_2 = (0.8D + 6.8)p$"

p. 23, table VIII.5: In footnote "b" change "not exceeding one pitch (thread) length." to read "not exceeding one and one-half pitches (threads) length."

p. 23, table VIII.5: Add footnote reference "d" to columns 3, 8–9, and add footnote "d" as follows:

"d E_0 short $= D - (0.05D + 1.037)p$
L_2 short $= (0.8D + 5.8)p$"

p. 24, table VIII.6: Add footnote reference "c" to column 3 and add footnote "c" as follows:

"c E_1 short $= E_0$ short $+ 0.0625L_1$ short."

p. 26: In last paragraph of column 1, line 2, add "deviation" between "diameter" and "multiplied".

p. 27, table VIII.10: Revise columns 10 and 11 to read:

Nominal pipe size	Tolerance on major diameter[f]	Tolerance on minor diameter[g]
	Plugs	Rings
1	10	11
in.	in. −	in. +
1/16	0.0019	0.0019
1/8	.0019	.0019
1/4	.0028	.0028
3/8	.0028	.0028
1/2	.0036	.0036
3/4	.0036	.0036
1	.0043	.0043
1 1/4	.0043	.0043
1 1/2	.0043	.0043
2	.0043	.0043
2 1/2	.0062	.0062
3	.0062	.0062

p. 27: In sentence preceding paragraph (a), change "checked with plain plug gages." to read "checked with plain cylindrical plug gages."

p. 29: In first paragraph of column 1, revise last three lines to read:

"chamfer cone, i.e., approximately ½ pitch measured axially, from the point of last scratch on chamfer cone toward the opposite end of the fitting."

p. 33, table VIII.17: Change heading in column 6 to read:
"$L_1 + 3$ threads, $(L_1 + L_3)$"

Change values in tables as follows:

Page	Table	Size	Column	From	To
31	VIII.15	3/8–18	13	.58712	.58612
34	VIII.18	3/8–18	8	.58712	.58612
36	VIII.20	1 1/2–11 1/2	9	1.82778	1.82777

p. 76, table IX.5: Omit values in columns 10 to 16, inclusive, for 3/4–14NGT(C1)–2, –3, and –4 sizes.

p. 78, 4. SAFETY DEVICE THREADS: Revise to read:

"4. SAFETY DEVICE THREADS

The safety devices on high pressure gas cylinder valves shall be provided with right hand threads of the Unified form, 19 threads per inch. The minimum length of engagement shall be ½ in. The thread dimensions shall be as follows:

	Boss (external thread)		Cap (internal thread)	
	Max	Min	Min	Max
	in.	in.	in.	in.
Major diameter	0.6500	0.6416	0.6500	------------
Pitch diameter	.6157	.6124	.6157	0.6200
Minor diameter	.5852	------------	.5929	.6008

The safety device threads shall be designated as follows:

Boss (external thread):
.650–19 UNS–3A
MAJOR DIA .6500–.6416
PD .6157–.6124

Cap (internal thread):
.650–19 UNS–3B
MINOR DIA .5929–.6008
PD .6157–.6200"

p. 79, table IX.6: Add "(external threads)" to table title.
Change values as follows:

Value	Column	From	To
$D_{(s-p)}$	11	1.1417	1.1260
K_0	2	.3315	.3339
K_0	11	.8824	.9234
$K_{(s-p)}$	2	.3544	.3567
$K_{(s-p)}$	11	.9771	1.0024
H	2	.2912	.2544
H	11	.5208	.3184
M	2	.6564	.6196
M	11	1.1524	.9500

In column 1, change "P" to "p, pitch", "H" to "H, ref", and "M" to "M, ref".
Change values for p, pitch (formerly P) as follows:
.0370 values to .03704, .0556 values to .05556, .0714 values to .07143, and .0870 values to .08696.

p. 79, table IX. 7:

Add "(internal threads)" to table title.

Change value for $D_{(8-p)}$ in column 11 from 1.1417 to 1.1260,

Change value for K_3 in column 11 from .8556 to .8856.

Change value for L_1+L_3 in column 11 from .5714 to .7030.

In col. 1, change "P" to "p, pitch", "A" to "A, ref", and "B" to "B, ref".

Change values for p, pitch (formerly P) as follows:

.0370 value to .03704, .0556 values to .05556, .0714 values to .07143, and .0870 values to .08696.

Values in columns 8, 9, and 10 are to be deleted since these values are not applicable to internal threads. (Table headings for these columns are to remain.)

p. 93, table X.1: Revise note a to read:

"Data on the 4–6NH(SPL) thread are included since this thread is used extensively aboard ship by the Navy Department."

p. 103, figure 7.1: Replace present figure with the following:

FIGURE 7.1—*Pipe thread symbols.*

p. 104, table 7.3: In column 4, change $^{11}3\!/_2$ to $1^{1}\!/_{32}$. For ¾ in. nominal pipe size, in column 4, show values as "$^{5}\%_{64}$—$^{a}.922$."

p. 105: Add the following sentence after the sentence ending in line 11 of the second column:

"They are also published in American Standards ASA C80.1–1959 Rigid Steel Conduit, Zinc Coated and C80.2–1959 Rigid Steel Conduit, Enameled."

p. 107, table 7.8: In column 7 (4 turns small) add .47774 for ¼ size. In columns 12 and 13 for ¾ size change .99887 to .98887.

p. 109, table 7.9: In table title, change "Interchangeability between" to "Recommended limitation of assembly among".

p. 109, table 7.10: In footnote "a" change

"not exceeding one pitch (thread) length." to "not exceeding one and one-half pitches (threads) length."

p. 109: In line 4 of second column, change "D–0.8625p" to "D–0.0625p".

p. 110, table 7.11: In footnote "b" change

"not exceeding one pitch (thread) length." to "not exceeding one and one-half pitches (threads) length."

p. 110: Revise subsection 9 to read as follows:

"9. SUPERSEDED GAGE DIMENSIONS AND GAGING PRACTICE FOR ⅛ AND ¼ SIZE DRYSEAL PIPE THREADS

"In this standard, the L_1 dimensions for the ⅛–27 and ¼–18 sizes were revised to correct for a disproportionate number of threads for hand engagement. The L_1 hand engagement dimensions affecting gages in tables VII.2, VII.9, VIII.15, VIII.16, and VIII.17 were revised to agree with the product dimensions for future gage procurement.

"Therefore, it should be noted that where basic-notch thread gages having superseded dimensions (see table 7.12) are being used for gaging the ⅛–27 and ¼–18 sizes, the formerly observed deviations from specified gaging practice should be applied as follows:

"Internal threads gaged by the Position Method should be ½ turn smaller for the ⅛–27 size and ½ turn larger for the ¼–18 size than the specified PD gaging steps.

"External threads gaged by the Turns Engagement Method should be ½ turn greater for the ⅛–27 size and ½ turn less for the ¼–18 size than the basic turns specified.

"Table 7.12 lists the dimensions related to the superseded L_1 dimensions of 0.1800 for the ⅛–27 size and 0.2000 for the ¼–18 size."

p. 110: Delete footnote 13.

p. 111, table 7.12: In title, change "Dryseal dimensions derived from" to "Dimensions related to".

p. 116: Revise first part of last paragraph to read:

"In some instances it may appear to be feasible to make cross connections with the American National standard thread.[14] However, where there are differences . . . ."

p. 116: Add following footnote at bottom of col. 1:

"[14] See footnote 10, p. 91, part II."

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PARTS I, II, & III

PART III CHANGES

The following changes should be made in Part III.

p. 14, table XII.12: In last column (5″D, 2 tpi) make following changes:

Internal threads:

Classes 5C and 6C, major dia, min   Change 4.4963 to 4.9463

Class 5C, major dia, max   Change 4.5041 to 4.9541

Class 6C, major dia, max   Change 4.5008 to 4.9508

p. 15, SNAP GAGE. (c) Minor diameter: Revise to read:

"(*c*) *Minor diameter.*—The minor diameter of the gage shall be computed by using the formula: basic minor diameter plus $p/4$, with the tolerance (table XII.13, col. 4) applied plus. If the value for minimum gage minor diameter thus determined is greater than the minimum pitch diameter of the external thread, the minimum minor diameter of the gage shall be taken as equal to the minimum pitch diameter of the external thread."

p. 20: In NOTATION under figure XIII.1, in each of last two lines, change second "=" to "—".

p. 44, paragraph 2. THREAD FORM: Revise to read:

"2. THREAD FORM.—The thread form shall be the Unified form of thread profile as specified in section III, part I."

p. 33: Revise first paragraph on page by transferring to end of first paragraph part of paragraph beginning with "However", line 11, and ending with "used.", line 21.

p. 44, paragraph 4. THREAD SIZE: Revise to read:

"4. THREAD SIZE AND DESIGNATION.—The basic major diameters for these threads are shown in tables XVIII.2 and XVIII.3.

These threads are designated as shown in the following example:
.5906–36 UNS–2A
MAJOR DIA .5896–.5841
PD .5716–.5682

Limits of size are calculated from the basic major dia, .5906, and threads per inch, 36, as shown in section IV of part I. The limits of size shown are for threads with no additive finish. If an additive finish is applied to the threads, the maximum major and maximum pitch diameters may be increased by the class 2A allowance. Such threads shall be gaged with basic-size GO gages to insure that the threads do not exceed the maximum limits for class 3A."

p. 45, paragraph 2. THREAD (lines 6 to 11 of column 1): Revise to read:

"2. THREAD.—The thread shall have 50 threads per inch. The thread dimensions are shown on figures XVIII.8 and XVIII.9."

p. 45, paragraph 2. THREAD (lines 7 to 10 from bottom of col. 1): Revise to read:

"2. THREAD.—The thread shall be 5–44 UNF–2A/2B in accordance with part I. The thread lengths are shown in figures XVIII.10 and XVIII.11."

p. 52, column 2: Revise lines 8 and 9 from bottom of column to read: "of effective length, L_e (see fig. 12.1)."

p. 59: Revise formula (20) to read:

$$E = M_w + \frac{p}{\tan \alpha_1 + \tan \alpha_2} - w\left(1 + \operatorname{cosec} \frac{\alpha_1 + \alpha_2}{2} \cos \frac{\alpha_1 - \alpha_2}{2}\right) - c.$$

p. 60, column 1: In line 15 from bottom of column change "on error" to "an error".

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